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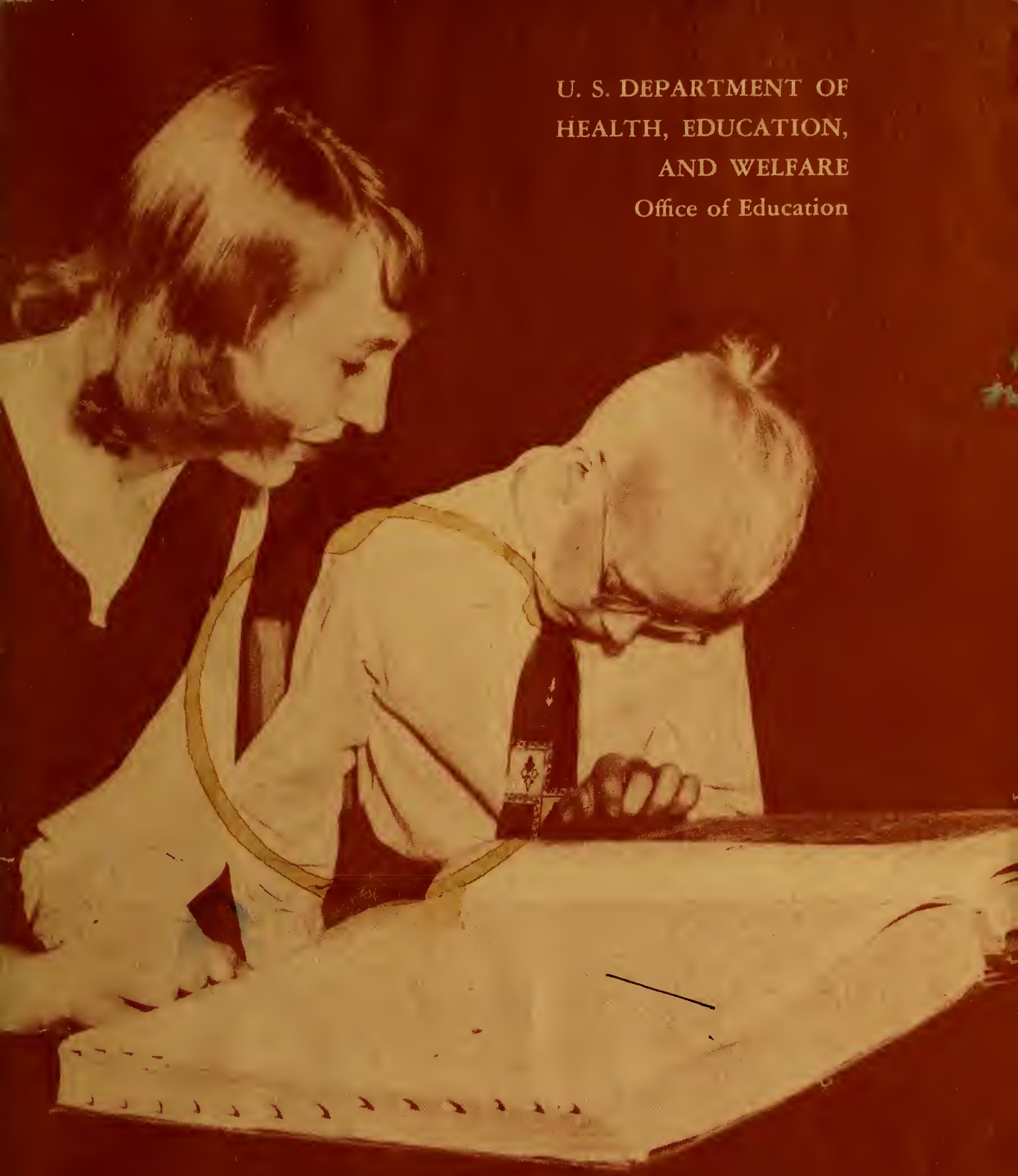

TEACHERS *of* CHILDREN *who are* PARTIALLY SEEING

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TEACHERS *of* CHILDREN *who are* PARTIALLY SEEING

A Report Based on Findings From the Study "Qualification and Preparation of Teachers of Exceptional Children"

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U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Marion B. Folsom, *Secretary*
Office of Education . . . . Samuel Miller Brownell, *Commissioner*

This publication is a part of the broader study

Qualification and Preparation of Teachers of Exceptional Children

Conducted by the Office of Education, and made possible by the cooperation of many agencies and individuals, and with the special help of the Association for the Aid of Crippled Children, New York City

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FOREWORD

THIS PUBLICATION is one of a series reporting on the nationwide study, *Qualification and Preparation of Teachers of Exceptional Children*, which for the past 3 years has been a major project of the Office of Education. More than 2,000 persons concerned with some aspect of the education of handicapped or gifted children have participated in the broad project.

The manner in which this study has been conducted is an example of cooperative action among persons from many organizations, school systems, colleges and universities, and the staff of the Office of Education.

Since the findings represent the opinions of many leaders in special education, it is hoped they will prove useful to teachers in their own professional development, to supervisors and administrators in the selection of personnel, to standard-setting agencies, and to colleges and universities preparing teachers of exceptional children.

WAYNE O. REED
Assistant Commissioner, Division of State and Local School Systems

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Director, Instruction, Organization, and Services Branch

ACKNOWLEDGMENTS

ONLY with the aid of many persons engaged in special education throughout the United States would the project which this bulletin reports have been possible. Deep gratitude is expressed here to all who have given of their time and their ideas; we wish it were possible to thank each one individually.

Special mention must be made of the following groups and persons who made major contributions:

The members of the National Committee and the Office of Education Policy Committee who have aided in planning and guiding the entire study.

The Association for the Aid of Crippled Children for their special cooperation.

Mrs. Dorothy Bryan, chairman, and the other members of the Committee on Competencies who prepared a statement of the distinctive knowledge, abilities, and skills needed by teachers of children who are partially seeing. Their statement, identifying and describing these competencies essential to such teachers, makes up a major part of this publication.

The 130 teachers of the partially seeing in various parts of the Nation who carefully filled out extensive inquiry forms. The information contained in these forms provides a second major part of the data upon which this report is based.

The following educators who assisted in developing and pretesting items contained in the inquiry form: Sylvia Fisher, Jane E. Hood, C. Edith Kerby, Mrs. Ethel Knight, Mrs. E. Louise Kraus, Ingeborg Nystrom, Evelyn Pleister, Gwen Retherford, Mrs. Hilda Shapiro, Mrs. Sara R. Weaver, Olive Whildin, and Marjorie A. C. Young. Because of their understanding of educational programs for partially seeing children, their guidance was especially valuable.

Herbert S. Conrad, Director of Research and Statistical Services of the Office of Education, for the part he has played in planning and executing this project, and for the services rendered by Mrs. Mabel C. Rice and other members of that staff in preparing some of the statistical data.

Patricia Robbins and Naomi Nehrer, of the staff, who had responsibility for collating and preparing the statistical data.

INTRODUCTION

IN the United States, education has been available for children with normal vision ever since colonial days. Special residential schools for blind pupils have been in operation for well over a hundred years. However, it was not until 1913 that public school provisions were made for partially seeing children.

Educators were slow to recognize that partially seeing children need special educational provisions because they could not identify them by appearance alone. One partially seeing child may be taken for a blind person because he wears very thick glasses and has a shambling walk. Another partially seeing child who does not wear glasses because he cannot benefit from them may be taken for a person who sees normally. At the same time he may be making full use of his limited vision. Gradually it was recognized that, since partially seeing children use their eyes as the chief channel to learning, they should not be educated as blind children, and since their vision was too limited to use many of the regular classroom aids, they could not be educated as normally seeing children. Generally speaking, a child is considered partially seeing if his visual acuity in the better eye, with correction, is 20/70 or less and he uses sight as the chief channel of learning.

These visually handicapped children are identified through parents or interested friends, through reports from eye specialists, and through vision screening tests given by local school system personnel, by health department personnel, and by various organizations (such as Delta Gamma Fraternity) working in cooperation with local school systems and/or departments of health. When a child who has uncorrected low vision and who is not under appropriate medical care is found, he is referred to an eye specialist for diagnosis and correction. The opinions of both an ophthalmologist and an educator are usually required to determine whether the child's corrected vision is low enough to warrant special services.

In the United States, the first educational provision for these visually handicapped children was the establishment of a class for partially seeing children at Boston, Mass., in 1913. No opportunities were available for the special preparation of teachers of the partially seeing until 1921, when Columbia University offered the first course. In the years that followed,

teacher preparation courses were established in various parts of the Nation. The late Mrs. Winifred Hathaway, of the National Society for the Prevention of Blindness, gave much leadership to this movement.[1]

Growth in the program to serve partially seeing children and youth in all sorts of communities and cities, large and small, has brought about a variety of procedures for their education, depending upon the individual child, the particular school system, and the community resources. The development of the various types of programs and services for partially seeing children has increased the need for competent teachers.

What should be required of the teacher of partially seeing children? What distinctive knowledge and abilities should she have? Because these questions were being raised, not only in the area of the partially seeing, but in all areas of special education, the broad study, *Qualification and Preparation of Teachers of Exceptional Children*, was undertaken.[2] This project was conducted by the Office of Education in collaboration with leaders in special education throughout the United States.[3]

The findings in this study that have bearing on the qualifications of teachers of partially seeing children are reported in this bulletin. Specifically, it includes information on the following subjects: (1) competencies needed by teachers of children who are partially seeing, (2) opinions on the proficiency of some teachers of the partially seeing, (3) education and experiences for acquiring these competencies, (4) summary and implications, and (5) projects for further study and research.

Two techniques were used to gather information for this publication. One was the report of a committee of experts in the education of the partially seeing; the other was the use of inquiry forms. Through the inquiry forms, facts and opinions were gathered from 130 [4] superior classroom teachers of the partially seeing, from 59 State and 81 local directors and supervisors of school programs for the partially seeing, and from 18 instructors in colleges and universities preparing teachers in this area.[5]

A large part of the information in this publication was provided by 130 *superior* teachers of partially seeing children and youth. Since these special teachers were currently in close daily association with partially seeing children, it was believed that they were in a position to make practical judgments about the competencies and experiences which make teachers effective. Throughout the Nation there are, of course, many more superior teachers of partially seeing children who would be qualified to participate

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[1] Mrs. Hathaway's book, *Education and Health of the Partially Seeing Child* (New York, Columbia University Press, 1943, 216 pages), has been a guide and inspiration to teachers and educators in this area.

[2] The general plan of the broad study is described in Appendix A.

[3] Committee members and consultants for the study are listed on page ii.

[4] For further information about the 130 teachers, see appendix B.

[5] Excerpts from these four inquiry forms are reproduced in appendix D.

in this project, but it had been decided by those planning the study that a sample of 100 teachers would be enough. So many completed inquiry forms were returned, however, that the number included in this study was 130. The procedure for selecting the sample of teachers of partially seeing children was identical with that used in the other areas of exceptionality in the broad study.[6]

[6] See appendix B.

Courtesy Special Education Section, Los Angeles City Schools

From a large type book she reads about the three bears.

COMPETENCIES NEEDED BY TEACHERS OF CHILDREN WHO ARE PARTIALLY SEEING

WHAT specific knowledge and abilities are needed by teachers of partially seeing children? Teachers in setting goals for themselves want the answer to this question. Persons in charge of teacher preparation in colleges and universities need definite information in order to evaluate and improve college curriculums. Directors of special education programs need this information in order to improve professional standards.

This study attempts to answer the question. The *identification* of distinctive competencies is so basic to the development of professional standards that opinions on this aspect of the study were collected from two groups of special educators by two techniques. A committee of experts in the education of the partially seeing formulated a statement in which they identified and described the needed competencies and 130 successful teachers of partially seeing children evaluated the relative importance of a list of items of knowledge and abilities which they believed contributed to their success which had been prepared by the study staff in cooperation with the specialists.

The competency committee's statement will be presented first, and then a report of the relative importance (for their own teaching success) which the 130 teachers placed on the competencies. Following the report of the committee and the teachers' responses, the opinions of the two groups will be compared.

THE COMMITTEE REPORT

Mrs. Dorothy Bryan,[1] *Chairman*

Mrs. Fredericka Bertram
Edith Cohoe
Florence Donermeyer
Mrs. Amie L. Dennison
Lorraine Galisdorfer
Marguerite Kastrup
Marjorie A. C. Young

Regardless of the kind or degree of his visual impairment, a partially seeing child is first of all a child, with the needs, desires, motivations,

[1] Titles of committee members are shown on page ii.

and problems common to all children. Parents, teachers, and others in contact with a partially seeing child must constantly see him in primary focus as an individual if his personality is to develop normally and fully.

In general, a partially seeing child is one whose visual acuity is 20/70 or less in the better eye after the best medical and optical correction and who can still use sight as his chief channel of learning. Any child who is suffering fom disease of the eye or disease of the body that seriously affects vision and who, in the opinion of the ophthalmologist and the educator, would benefit from special education facilities may also be classified as partially seeing. In addition, there are some children who may need the special services on a temporary basis.

Since partially seeing children are basically "seeing" persons, they should be educated and prepared for life in a seeing society. This is best accomplished when the school provides an environment which approximates the normal as closely as possible and offers opportunities for continuous contact with the usual problems of living. The educational needs of these children can be met in a variety of ways. The problems peculiar to the local school district, as well as the individual child, must be considered in the choice of program used. Under one type program children may be enrolled in a special room where the teacher arranges their work, scheduling part of it in the regular grades. Under a second type program they may be enrolled in regular classes and report to a special resource room for the help they need from a special teacher. Under a third type program the special teacher may go from school to school working with the partially seeing children and their regular teachers. In this type of program she may provide needed equipment, counseling and guidance, and tutoring in the areas where the children need special help, and may also serve as a visual consultant for the school she visits.

Regardless of the type program used for partially seeing children, it must be an integral part of and not something apart from or superimposed upon the regular school curricular and cocurricular activities. Special services and materials should be available insofar as they are needed to assist the child in realizing his optimum physical, mental, social, and vocational potentialities.

Since 1913 the prevalent philosophy of those working with partially seeing children has been that they should be educated in day schools so that integrated programs may be developed in which partially seeing and normally seeing children may work and play together. If this objective is to be achieved, teachers of partially seeing children must

work closely with teachers of regular classes, and therefore their basic qualifications and education should be the same. In addition, they need specialized professional and personal qualifications.

Professional Qualifications

Some experienced teachers of regular classes can meet the requirements for certification in the localities in which they are employed without having had specialized preparation, but increasingly they are expected to have professional preparation in the area of the partially seeing. Since teachers of the partially seeing must be thoroughly familiar with all the curriculums, methods, and materials used in the regular grades and must know how these differ from grade to grade, it is desirable for them to have at least 3 years of successful teaching

Courtesy Decatur, Ill., Public Schools

Large type text books aid this child.

experience in regular grades, most of it preferably at the elementary level.

Although all teachers should be interested in the public relations aspect of education, teachers of the partially seeing need to participate in public relations activities to a greater extent than others if they are to keep alive the community's interest in providing adequate facilities for partially seeing children.

Willingness to keep abreast of all developments affecting the health, welfare, and education of children and youth is a fundamental attribute of all good teachers. Because of the special problems caused by severe visual impairment and the constant advances in medical, clinical, and psychological knowledge, teachers of the partially seeing should have a greater willingness to keep abreast of new ideas in all fields and to participate in the activities of school and professional organizations.

Personal Qualities

Every teacher should possess a wholesome, well-adjusted personality, an attractive appearance, a sense of humor, and personal maturity and poise. The teacher who works with partially seeing children, many of whom will have secondary psychological, emotional, and social problems resulting from their visual handicaps, will need these personal qualities in greater measure than others.

The special teacher must be able to help the partially seeing child accept his handicap and compensate for it. This implies not only that she be well informed but also that she have an interested and objective attitude toward the handicap and its effect upon the total personality development of the child. This attitude will include patience and perseverance to cope with the child's learning difficulties in an understanding manner.

In the interests of developing desirable interpersonal and intraprofessional relationships, the special teacher should possess certain personal qualities to an even greater degree than the regular classroom teacher. Since the teacher of partially seeing children will have to prepare many extra materials and will need to assist the pupils in reading activities of all kinds, good vision is essential. Normal speech and hearing and a full measure of general health and physical stamina should also be required of the teacher of partially seeing children.

Some standard teaching materials cannot be used effectively with partially seeing children. The special teacher will need aptitudes of creativeness, self-direction, and resourcefulness to be able to modify the curricular materials and activities and to adapt them to the individual differences of partially seeing children. To illustrate, whenever reading material is not available in large type, it may be necessary for

the teacher to make a recording for the child, provide a student reader, or otherwise make the material available.

Teachers of partially seeing children should possess friendly, cooperative feelings in order to participate in and appreciate the teamwork required for a flexible, on-going program which includes the school, the home, and the community. This implies that the teacher should be sensitive to the reactions of others in order to know when to assume the leadership role.

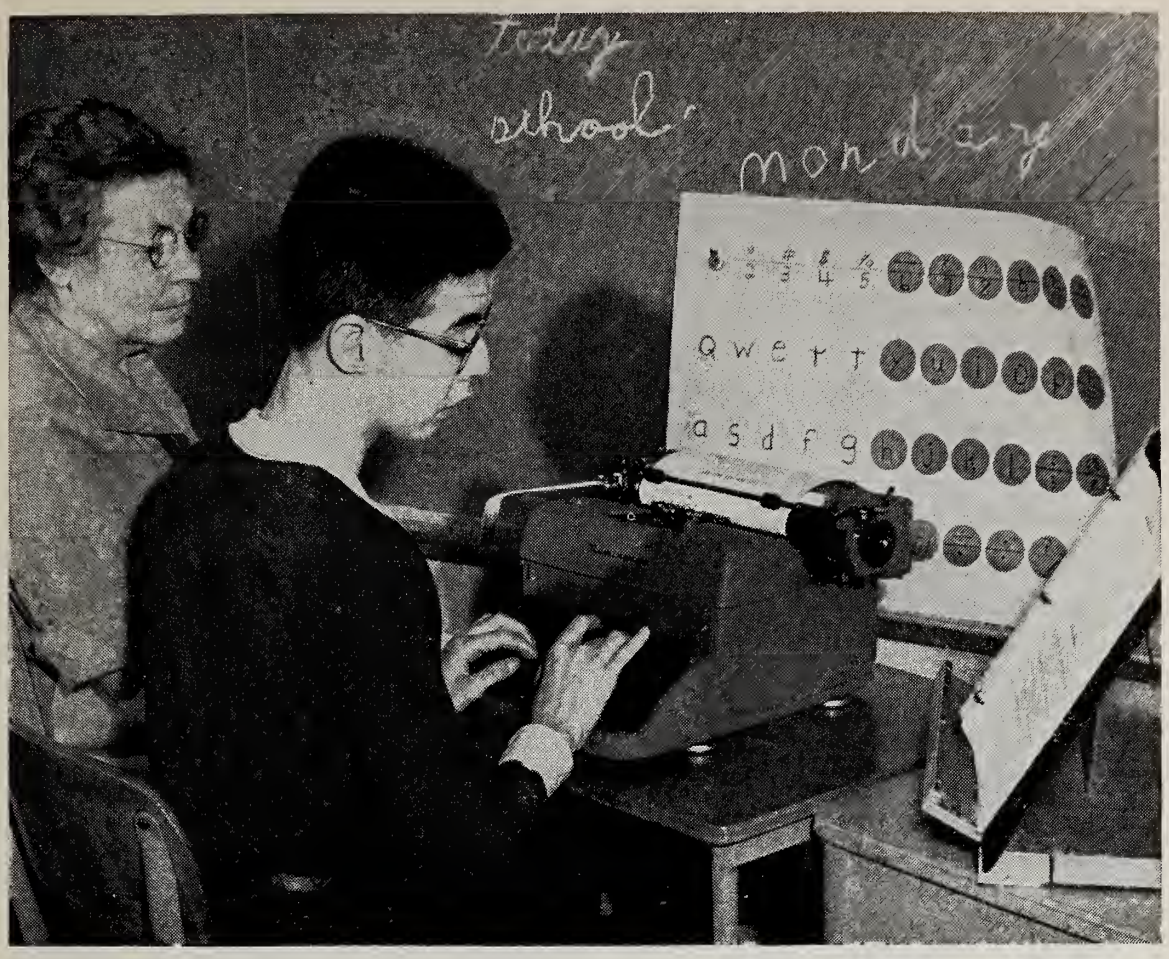
Knowledge and Understanding

Specialized knowledge and understanding occupy a very important place in the group of specific competencies essential for teachers of partially seeing children. In essence they provide the very substance without which particular skills and attitudes basic to the teachers of partially seeing children could not be acquired. Knowledge and understanding are regarded as indispensable.

Teachers of partially seeing children should possess a knowledge of the anatomy, physiology, and hygiene of the eye. In addition, teachers should know eye pathology and types of visual impairment commonly found among partially seeing pupils, such as: (1) refractive errors, (2) eye muscle imbalances, (3) nystagmus, (4) optic nerve atrophy, (5) cataracts, and (6) restrictions of the visual field. Combinations of visual disabilities may be present in partially seeing children.

While it is not the responsibility of the teacher of partially seeing children in most communities to give vision screening tests, she should have a knowledge of screening devices and other case-finding procedures. As a specialized resource person she will be called upon by various professional groups within the school and community to provide accurate, up-to-date information on these topics. This knowledge will also enable her to assist parents in interpreting the findings of screening programs and in applying the needed follow-through procedures.

Partially seeing children have needs to be satisfied, just as other children have. Their visual impairment may make it more difficult to meet these needs. When some of the children's basic needs are unfulfilled, feelings of frustration and inferiority may result. To be able to deal adequately with such personality difficulties, the special class teacher should possess a fund of mental health principles to guide her in helping the child gain the insight necessary to solve his problems. She should have a knowledge of general counseling and guidance materials and techniques as well as a background of special information, including information on personal aptitudes, interests, and vocational resources.



Courtesy Arlington, Va., Public Schools

The typewriter is a special aid to this boy.

In interpreting the child's behavior, the special teacher should be able to use the data from the vision tests and medical records. General information on the visual impairment and knowledge of child study techniques—such as case histories, sociograms, anecdotal records, and interviews—all contribute to a teacher's understanding of the child.

Teachers of partially seeing children need a knowledge of the functions and responsibilities of professional workers, such as ophthalmologists, optometrists, school medical advisers, counselors, principals, school social workers, public health nurses, and psychologists. Teachers should understand the role of each person serving on the team in order to refer cases and interpret and carry out recommendations in the interest of the child, the school, and the home.

Teachers should be familiar with resources provided by many agencies interested in the health, welfare, and education of partially seeing children. If they are to make or recommend intelligent use of the available services, they must know the proper avenues and procedures through which contacts should be made. It is necessary for teachers to be familiar with community, State, and national organizations serving all children as well as the specialized agencies concerned only with partially seeing children.

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Teachers' understanding of agencies within a community should include a knowledge of many services, such as those of child guidance centers, psychological and medical clinics, family service, maternal and child care agencies, and religious and civic organizations. On the State level, there are health and educational services, welfare organizations, and vocational agencies for providing individual guidance, materials, and speakers. Teachers of partially seeing children need to know and use the services available from local, State, and national agencies and associations.

Educational materials and equipment that may be used advantageously with partially seeing children are essential to a program planned to meet the learners' needs and abilities. The teacher should have a thorough knowledge of compensatory equipment and should know where to obtain it. Special equipment [2] used by partially seeing children includes: (1) Books printed in large 24- or 18-point type, (2) pencils with soft lead, (3) large pieces of white chalk, (4) nonglossy maps and globes with few details, (5) movable desks with tops that adjust to an angle that provides the most comfortable eye focus, (6) chairs and tables for art and craft work, (7) art and craft materials, and (8) typewriters with large type. Certain audiovisual devices are excellent for providing learning opportunities in listening and speaking skills. For this reason, it is important for the teacher to have a knowledge of such audiovisual aids. Good organizational ability is involved in caring for and storing this equipment.

Large-type standardized tests are available for use with partially seeing children. When the teacher is familiar with them, she has an additional tool for appraising pupil progress and the basis for adapting teaching and learning activities to individual differences.

Objectivity in appraising and using all special materials and techniques is an attitude required of all teachers of partially seeing children. This means that teachers should know how to test and evaluate, discard or retain, or adjust or augment all special materials in relation to the general program for partially seeing children and its adaptability for use with individual children.

A good visual environment within the classroom is very important for optimum learning and teaching conditions. The teacher is responsible for creating and maintaining a good visual atmosphere that meets the physical needs of the children and promotes their ocular comfort. To do this she needs a knowledge of the correct placement of adjustable furniture and other equipment as well as an understanding of the basic principles of good natural and artificial lighting. The

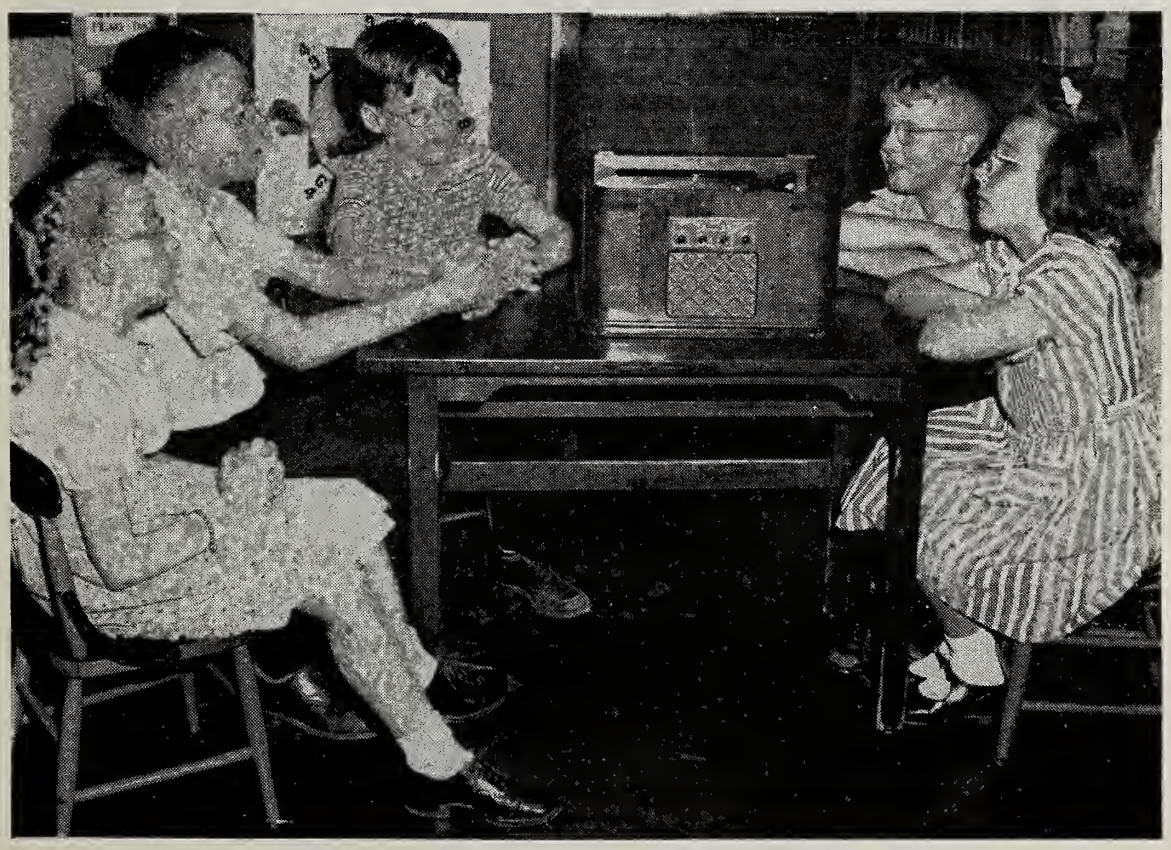
[2] Further information may be secured from the National Society for the Prevention of Blindness or from State departments of education.

colors and surfaces of ceilings, walls, floors, chalkboards, and bulletin boards are also of fundamental importance.

The teacher of partially seeing children should be able to organize and administer a suitable program for the education of the partially seeing, which requires a knowledge of various organizational patterns. Sometimes not one approach but a combination of plans is needed to make the teaching-learning experiences of partially seeing children effective.

The teacher should have the ability to bring about a definite articulation between the elementary and secondary school levels in organizing and administering programs for partially seeing children. To do this the teacher, as consultant, must apply principles and practices to a wide range of pupil abilities. Her knowledge must be extensive enough to cover the following areas, as they may be affected by partial vision: (1) Social maturity, (2) emotional stability, (3) independence and self-confidence, (4) vocational guidance, and (5) civic responsibility.

Finally, the teacher must be aware of the time factor involved in the total personality development and the adjustment process of partially seeing children. She should realize that retrogressions may manifest themselves, but that over a long period of time the child should make



Courtesy Oak Park, Ill., Nathaniel Hawthorne School

These children learn through listening.

strides toward the development of optimum physical, social, and mental growth. The individual adjustment process is continuous. It involves the child's recognizing, evaluating, and accepting his handicap.

Keeping abreast of the advances, changing trends, recent materials, and different techniques encourages a *fresh* approach to the many challenges that the teacher meets in providing a modern program for the education of partially seeing children.

Abilities and Skills

The teacher of partially seeing children should have varied skill in assisting with the organization and administration of educational programs for partially seeing children and should know which of the many types of programs will function best in the city or community. In utilizing such special knowledge, she must have skill in adapting and modifying school programs and schedules to meet the individual needs of partially seeing children.

The teacher of partially seeing children should be able to teach the standard curricular subject matter and some of the cocurricular activities in which partially seeing children participate. She should have a wide educational background so that she can help the children with their varied instructional problems. In addition, she needs skill in helping them establish study habits that make the most efficient use of vision and learning by listening.

The teacher should be able to adapt standard materials and techniques to the needs of partially seeing children. She will prepare much material on the large-type typewriter and by hand. She may teach certain children to use magnifying devices as an aid to learning, and she may select student readers to read certain material to partially seeing pupils.

The teacher needs skill in using and teaching those forms of manuscript and cursive writing that best meet the needs of the children. She should know how to type and how to teach touch typing to children of various ages so that they may reduce the amount of close eye work. She needs skill in lettering by hand in order to prepare flash cards, posters, and other special material. A teacher of partially seeing children should also have the ability to operate and to teach the use of auditory devices, such as tape recorders, Dictaphones, and Talking Book machines.

The teacher should be able to evaluate resource material related to the education and health of partially seeing children in order to interpret information correctly to the other teachers, to parents, and to pupils. It is necessary, also, for the teacher to evaluate personnel who deal with partially seeing children. She should be skillful in apprais-

Courtesy Special Education Dept., Detroit Public Schools

In the class materials are adjusted for this boy.

ing and using the services of other teachers, counselors, social workers, and others.

Since partially seeing children may become discouraged and frustrated from not being able to see as other children do, the teacher needs special counseling skills to assist them in gaining an insight into their assets and limitations, so that they can plan realistically for their future.

The teacher of partially seeing children should have skill in evaluating visual environments and helping other school personnel to develop in children an appreciation of good seeing conditions and a responsibility for establishing and maintaining them. The teacher of the partially seeing requires the skill to detect through observation the signs and symptoms of vision defects in order that she may assist in obtaining needed services for the children. She should have skill in evaluating, giving, and interpreting vision screening tests. Although

she will not usually do the vision screening herself, she may be called upon to teach others how to do it and to give expert advice to those who have primary responsibility for the vision screening program in the school.

Multiple Handicaps

Partially seeing children, in addition to their visual impairment, may have other handicaps such as speech defects, hearing loss, brain injury, mental retardation, cerebral palsy. The instruction of such children may require various teacher competencies, depending upon whether they are in the program for the partially seeing or in another program.

When the child is in a program for the partially seeing, it is likely to be the special teacher's responsibility to provide or secure the services needed because of his secondary handicap. For a child with *speech defects*, the teacher should know what services are available for speech correction, include them in the program, and advise the parents of such resources. When *brain injury* is the child's secondary problem, the teacher will need to enlist the aid of appropriate medical and educational authorities for guidance; she will then be able to plan a program in the light of the recommendations. If the teacher understands something about mental deficiency, the partially seeing child with a degree of *mental retardation* may make considerable progress under the individualized instruction used for the partially seeing. When the partially seeing child has a *hearing loss* the teacher may need to enlist the services of an itinerant specialist. When the child has a *cerebral palsied condition*, the teacher may help in adjusting the program and in securing the needed therapies.

The teacher of partially seeing children has responsibilities beyond those of her own program. There are many ways in which she can assist the partially seeing child who, because of an additional handicap, is being educated in another special education program. When the *visually impaired* child is in another program, such as one for the *orthopedic*, the *deaf*, or the *mentally retarded*, it is the duty of the teacher of partially seeing children, with her specialized competencies, to work with the child's teacher in setting up his educational plan. She may advise on such matters as curriculum adjustment, books in large type, large pieces of chalk, adjustable desk tops, lighting, and eye hygiene. If it is needed she may supply material copied in large type.

Among those children so seriously handicapped as to be *homebound*, some may also have impaired vision. Here again the teacher of partially seeing children may be one of the team who advise on adjustments for the child. For example, she will know that such a child may require eye rest following short study periods; that the bedridden

child should have his bed placed in proper position with reference to lighting. She will emphasize the importance of correctly fitted glasses and of supplying reading and writing materials in large type as needed.

Summary

The teacher of partially seeing children with a constructive attitude has a positive influence on the acceptance of the program by other professional people. She should be willing to assume a coordinating role between the various services available to the children. The success of the program is dependent upon attitudes of mutual understanding and respect.

Relationships with the child, other staff members, other pupils, and parents should be based on clear, mature consideration of the whole problem. Neither emotionalism nor rigidity has a place in these relationships, since the work of the teacher of partially seeing children requires constant adjustment and the ability to meet change with equanimity and stability.

Counseling of the handicapped is a long-term process. It means assisting the student in the establishment of positive values, of a philosophy by which he may live with himself as he is, of the worth of each individual, and of his place as a contributing member of society. When these positive attitudes are stressed, the focus is on the individual and his needs and not on the visual problem alone. The aim is not only to solve an immediate problem but also to help the student *to grow* so that he may better cope with present and future problems. This method relies on motivation of the student to do something about himself. Freedom of thought and self-direction are important, because then the function of the teacher becomes one of guidance, with emphasis on positive values and the goal of a wholesome, constructive, happy, and abundant life.

In relation to education teamwork, the teacher of partially seeing children should realize that the partially seeing constitute a small percentage of the total school enrollment and that the teachers of regular grades are responsible for a total program of instruction and thus have a right to expect the special teacher to take the initiative in making the necessary adjustments.

[*End of Committee Report*]

TEACHERS' APPRAISAL OF THE IMPORTANCE OF COMPETENCIES

Because the teachers are involved in the day-to-day relationships with partially seeing children and know which competencies have contributed most to their own success, it seems important to have their opinions as well as those of the committee of experts.

The 130 teachers [3] rated the relative importance of a list of 87 competencies included in the inquiry forms sent to them.[4] They rated these items as "very important," "important," "less important," or "not important." These competencies, arranged in rank order according to the average ratings of relative importance,[5] appear in table I on page 18.[6]

The competencies listed in table I appear to have much significance for effective instruction, since 130 successful teachers in various parts of the Nation placed high value on nearly all of them. The teachers rated 37 of the competencies as "very important" and 45 as "important." They considered only 5 as "less important," and none as "not important." Even the knowledge and skills given the lowest average ratings were highly valued by some of the 130 teachers.

In an overall view of the teachers' evaluation of the competencies, those which stand highest include understanding the social and emotional problems arising from visual impairment, planning educational programs, and cooperating with other staff members. More specifically, the teachers stressed the classroom atmosphere, personal adjustment of the child, and cooperation with regular grade teachers in order to make the child a part of the total school program. They agreed also on the importance of the teacher's ability to recognize eye conditions that may need referral to medical personnel, to understand eyestrain and fatigue, and to adapt educational material for the child. They recognized the necessity of knowing about special classrooms, supplies and equipment.

The teachers placed relatively less emphasis on such abilities as teaching music and physical education to partially seeing children. Discretion should be used in drawing interpretations from these evaluations since the teachers were asked to rate the different competencies in terms of their own situations. In some school systems the teaching of music and physical education, for example, is not considered a responsibility of the classroom teacher.

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[3] The method used in selecting the participating teachers and the information about their current teaching positions and specialized preparation are outlined in appendix B.

[4] See appendix D, inquiry form EXC—4G, question 3.

[5] For a description of the statistical procedures used in analyzing this data and placing the competencies in rank order, see appendix C.

[6] Table I also contains some other information on proficiency ratings which is discussed on pages 31 to 33.

Knowledge of medical conditions causing visual impairment was stressed by the teachers, including some of the technical competencies which equip the teacher of partially seeing children to meet the particular needs of these children. They considered it "very important" to able to recognize eye conditions among partially seeing pupils which may need referral to medical specialists (8),[7] and to teach eye hygiene and the proper use of glasses to partially seeing pupils (9). The teachers rated as "important" a knowledge of the differences in function and responsibilities of ophthalmologists, optometrists, and opticians (51); of the anatomy and physiology of the eye (58); of the various conditions which result in loss of vision (56); and the causes of these conditions (61). Nearly half of the teachers (as raw data show) rated the last four competencies higher than the other half. Does this mean that there is a marked difference among teachers in their knowledge of medical factors? What courses in the medical field have these teachers had, and which ones do they consider necessary for effective work with partially seeing children? This appears to be an area for further study.

Helping the child with his personal adjustment was considered exceedingly important by the teachers. Of all the competencies in the list, the two which they valued most highly were: the ability to create a classroom atmosphere conducive to good mental health (1); and the ability to help shy pupils develop into well-adjusted individuals (2).

The 130 successful teachers also placed the following competencies near the top of the "very important" list: A knowledge of the social and emotional problems arising from partial loss of vision (4), the ability to observe the partially seeing child's behavior and provide for his special needs (7), and to counsel partially seeing children on their personal attitudes toward their handicap (12). They also considered skill in counseling partially seeing children on their social problems (22), and their vocational problems and life goals (29) as "very important."

Evaluating the child by means of educational interpretations from psychological (16), medical (21), and social workers' (26) reports was thought to be "very important." The 130 teachers considered it "important" to have the ability to use cumulative records of partially seeing children (46) and the knowledge of the special evaluative materials such as diagnostic and achievement tests in large type (66).

On the average, the participants considered the ability to administer screening tests of visual acuity (72), group achievement (76), aptitude (77), individual tests of mental ability (79), and screening tests of auditory acuity (82) "important" but rather far down the list. The raw data show considerable difference of opinion on the relative importance of teachers' ability to administer tests. The reasons for these relatively low evaluations are not known. In some communities teachers perform these testing

[7] In each case the number in parentheses refers to the rank order of importance in table I.

Table I.—Competencies Rated by 130 Teachers of Partially Seeing Children

Rank order [1] of importance	Competencies
	Items rated VERY IMPORTANT (1–37)
	The ability—
1.....	to create a classroom atmosphere that is free from pressure and conducive to good mental health. (P, 5) [2]
2.....	to help shy, reserved, partially seeing pupils develop into well-adjusted individuals. (P, 16)
3.....	to cooperate with regular teachers in planning schedules and activities, so that the partially seeing pupils can participate in regular classroom activities and the total school program. (P, 7)
	A knowledge or understanding—
4 sd [3]	of social and emotional problems arising from partial loss of vision. (P, 25)
	The ability—
5.....	to plan a program and time schedule for each child aimed at minimizing eyestrain and fatigue. (P, 4)
6.....	to create and to encourage others to create a broad range of situations in school in which partially seeing pupils have an opportunity to associate naturally and freely with children of normal vision. (P, 22)
7.....	to observe and analyze the partially seeing pupil's behavior, and to recognize and provide for his special needs. (P, 14)
8.....	to recognize eyestrain and other conditions among the partially seeing pupils which suggest the need for referral to medical personnel. (P, 6)
9.....	to teach eye hygiene and proper use of glasses to partially seeing pupils. (P, 15)
10.....	to arrange a classroom (furniture, lighting, decoration) for good visual working conditions. (P, 1)
11.....	to cooperate with other special teachers and regular school personnel in adopting and developing an integrated educational program for each partially seeing pupil. (P, 18)
12.....	to counsel partially seeing children on their personal attitudes toward their physical handicap. (P, 17)
13.....	to adapt educational materials and teaching procedures used with normal children to the needs of partially seeing pupils. (P, 9)
	A knowledge or understanding—
14.....	of types, sources of procurement, and uses of special classroom supplies and equipment, such as large type books, soft chalk, soft lead pencils, nonglossy maps with few details, desks with adjustable tops, typewriters with enlarged type, eye-ease paper, and magnifying devices. (P, 12)
	The ability—
15.....	to counsel partially seeing children on their educational problems. (P, 10)
16.....	to make educational interpretations from psychological records. (P, 30)
17.....	to interpret the special education needs of partially seeing pupils to administrators, supervisors, and other regular school personnel, and to the general public. (P, 37)
18.....	to enunciate clearly and pronounce correctly. (P, 8)

Footnotes at end of table.

Table I.—Competencies Rated by 130 Teachers of Partially Seeing Children—Continued

Rank order [1] of importance	Competencies
	Items rated VERY IMPORTANT (1–37)—Continued
	The ability—
19.....	to help parents of partially seeing pupils understand and deal with their child's limitations and potentialities. (P, 28)
20.....	to evaluate the physical environment (including lighting) of classrooms for partially seeing children. (P, 11)
21.....	to make educational interpretations from ophthalmological and other medical reports. (P, 34)
22.....	to counsel partially seeing children on their social problems. (P, 35)
23.....	to prepare teaching materials in large type. (P, 13)
	A knowledge or understanding—
24.....	of hygiene of the eye. (P, 21)
25.....	of the methods or techniques of teaching the normal child. (P, 3)
	The ability—
26.....	to make educational interpretations from reports of social workers. (P, 29)
27.....	to help parents with the social and emotional problems which may arise from having a partially seeing child in the family. (P, 50)
28.....	to teach health education to partially seeing children. (P, 41)
29 sd....	to counsel partially seeing children on their vocational problems and life goals. (P, 55)
30.....	to help parents of partially seeing pupils with their child's school placement. (P, 36)
31.....	to serve as consultant to regular school personnel on the education of partially seeing pupils. (P, 24)
32.....	to teach a multigrade class of partially seeing pupils. (P, 19)
33.....	to give stimulating experiences to partially seeing pupils through story telling and conversation. (P, 27)
34 sd....	to develop interests of partially seeing pupils and guide into hobbies, diversional interests, and clubs suited to their abilities. (P, 57)
	A knowledge or understanding—
35 sd....	of the methods or techniques of teaching the socially or emotionally disturbed child. (P, 60)
	The ability—
36.....	to work as a member of a team with other professional personnel, such as medical and psychological, in making a case study of a partially seeing child aimed at planning a program suited to his needs and abilities. (P, 42)
37.....	to see normally. (P, 2)
	Items rated IMPORTANT (38–82)
	A knowledge or understanding—
38.....	of professional literature on the education and psychology of partially seeing children. (P, 40)

Footnotes at end of table.

Table I.—Competencies Rated by 130 Teachers of Partially Seeing Children—Continued

Rank order [1] of importance	Competencies
	Items rated IMPORTANT (38–82)—Continued
	The ability—
39.....	to teach touch typing to partially seeing pupils. (P, 48)
	A knowledge or understanding—
40.....	of the basic theory of light, as applied to refraction and illumination, including correct lighting principles (control of light and glare, and corrective lens). (P, 53)
41 sd....	of vocational problems arising from partial loss of vision. (P, 66)
	The ability—
42.....	to recognize signs and symptoms which indicate vision impairment in the general school population. (P, 33)
43.....	to write in manuscript clearly. (P, 31)
	A knowledge or understanding—
44.....	of the implications for an educational program of the various types of conditions which result in loss of vision. (P, 58)
	The ability—
45.....	to evaluate educational personnel, programs, and materials in the light of the education and health of partially seeing pupils. (P, 46)
46 sd....	to develop and use individual cumulative records of partially seeing pupils. (P, 26)
47....	to work with pupils in bringing practical, child-selected activities into the curriculum. (P, 52)
48...	to operate and use audiovisual aids, such as recorders, sound projectors, record players, and Talking Book machines. (P, 54)
49 sd	to teach partially seeing pupils to use phonetics in word recognition. (P, 23)
	A knowledge or understanding—
50 sd....	of type faces and sizes of print. (P, 32)
51 sd....	of differences in the functions and responsibilities of ophthalmologists, optometrists, and opticians. (P, 20)
	The ability—
52.....	to help parents get information from clinics and agencies serving the partially seeing. (P, 59)
53 sd....	to help parents of partially seeing pupils with their child's occupational placement. (P, 71)
	A knowledge or understanding—
54.....	of different methods of organizing education programs for partially seeing pupils and the advantages and disadvantages of these programs. (P, 49)
	The ability—
55.....	to contribute to community leadership in justifying, establishing, and developing an educational program for partially seeing children. (P, 64)
	A knowledge or understanding—
56.....	of various conditions which result in loss of vision. (P, 45)

Footnotes at end of table.

Table I.—Competencies Rated by 130 Teachers of Partially Seeing Children—Continued

Rank order [1] of importance	Competencies
	Items rated IMPORTANT (38–82)—Continued
	The ability—
57.....	to touch type. (P, 56)
	A knowledge or understanding—
58 sd....	of anatomy and physiology of the eye. (P, 39)
59.....	of various arts and crafts media which are recommended for partially seeing pupils. (P, 63)
	The ability—
60 sd....	to participate in parent-school activities. (P, 43)
	A knowledge or understanding—
61 sd....	of causes of the various conditions which result in partial vision. (P, 51)
62 sd....	of purposes, services, and locations of national organizations concerned with the education and general welfare of the partially seeing, such as the International Council for Exceptional Children and the National Society for the Prevention of Blindness. (P, 47)
	The ability—
63 sd....	to do lettering. (P, 44)
64 sd....	to work with architects and school administrators in planning and securing special school building features and special equipment for partially seeing pupils. (P, 70)
	A knowledge or understanding—
65.....	of State and local laws and regulations which pertain to the education of exceptional children. (P, 65)
66.....	of special evaluative materials for partially seeing pupils, such as diagnostic and achievement tests in large type. (P, 62)
67.....	of eye movements in reading. (P, 61)
68.....	of the general plan of identification, medical treatment, and the prognosis for the various conditions which result in loss of vision. (P, 69)
	The ability—
69.....	to teach music to partially seeing pupils. (P, 77)
70.....	to teach physical education to partially seeing pupils. (P, 74)
71.....	to teach fine arts to partially seeing pupils. (P, 67)
72.....	to administer screening tests of visual acuity to partially seeing pupils. (P, 75)
	A knowledge or understanding—
73.....	of the methods or techniques of teaching the mentally retarded child. (P, 76)
74.....	of the methods or techniques of teaching the gifted child. (P, 73)
	The ability—
75.....	to teach dramatic arts to partially seeing pupils. (P, 72)
76 sd....	to administer group achievement tests to partially seeing pupils. (P, 68)
77.....	to administer aptitude tests to partially seeing pupils. (P, 80)
	A knowledge or understanding—
78 sd....	of the history of education of the partially seeing. (P, 38)

Footnotes at end of table.

Table I.—Competencies Rated by 130 Teachers of Partially Seeing Children—Continued

Rank order [1] of importance	Competencies
	Items rated IMPORTANT (38-82)—Continued
	The ability—
79.....	to administer individual tests of mental ability to partially seeing pupils. (P, 79)
80.....	to teach arts and crafts to partially seeing pupils. (P, 78)
	A knowledge or understanding—
81.....	of the findings of research studies which have bearing on the education, psychology, and social status of the blind. (P, 81)
	The ability—
82 sd....	to administer screening tests of auditory acuity to partially seeing pupils. (P, 85)
	Items rated LESS IMPORTANT (83-87)
	The ability—
83.....	to teach domestic arts to partially seeing pupils. (P, 82)
	A knowledge or understanding—
84.....	of the methods and techniques of teaching the blind child. (P, 83)
85.....	of the methods and techniques of teaching the cerebral palsied child. (P, 84)
	The ability—
86 sd....	to teach industrial arts to partially seeing pupils. (P, 87)
87.....	to teach braille writing and reading. (P, 86)
	Items rated NOT IMPORTANT—*NONE*

[1] See page 54 of appendix C for a detailed description of the statistical procedures used to determine the rank order of importance of the 87 competencies.

[2] *P* denotes rank order of proficiency. When the inquiry forms were sent to teachers they were requested not only to rate the 87 items as to importance, but also to indicate their proficiency in each of the various competencies. A discussion of these ratings of proficiency may be found on page 31. For a detailed explanation of the statistical procedures employed to determine the rank order, see page 54 of appendix C.

[3] *sd* denotes significant difference. On all items marked *sd*, analysis showed a statistically significant difference between the average ratings of importance and the average ratings of proficiency. See page 55, appendix, C, for the statistical procedures employed to determine significant difference. A discussion of these differences may be found on page 31.

functions while in other communities tests are administered by special personnel.

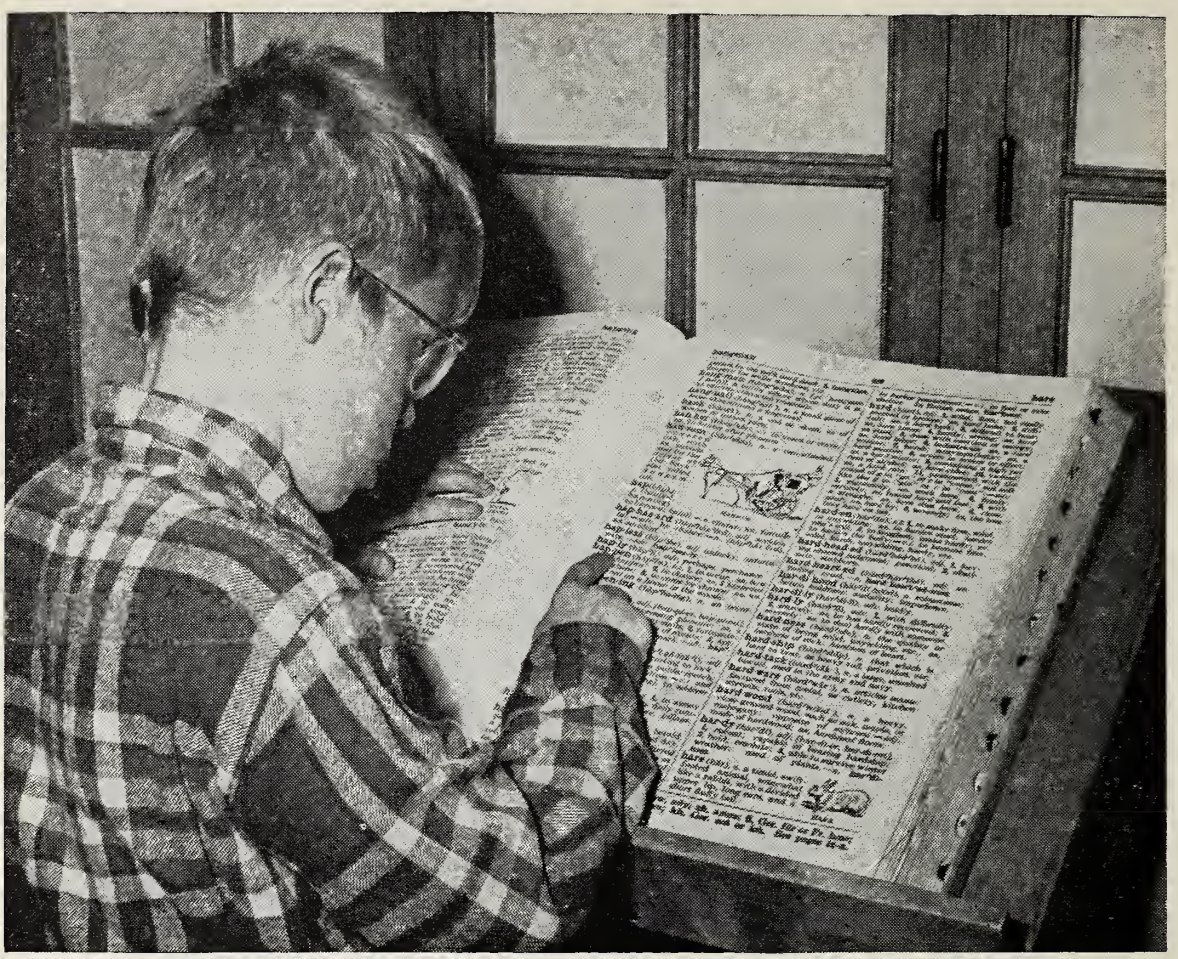
The participants recognized the teacher's need to understand the child's handicap in order to *provide an adequate curriculum.* They considered it "very important" to know how to plan a child's program so that fatigue and eyestrain might be minimized (5), and to create and to encourage others to create situations in which the partially seeing associated naturally with children of normal vision (6), to adapt the educational materials and methods used with normal children (13), and to counsel partially seeing children on their educational problems (15).

The teachers recognized the importance of a knowledge of methods used in teaching the normal children (25), the ability to teach health education to the partially seeing (28), and the ability to teach a multigrade class of partially seeing children (32). They also considered it "very important" to develop the interests of the partially seeing child and guide him into hobbies and clubs (34). They thought it "important" to be familiar with the different methods of organizing educational programs for partially seeing children (54).

Teaching techniques and materials which make it easier for the partially seeing child to see and mechanical aids which develop listening skills were highly valued by the teachers. They considered it "very important" to have skill in teaching eye hygiene (9), to be able to arrange a classroom for good visual working conditions (10), to have a knowledge of the special supplies and equipment needed (14), and to have the ability to prepare teaching material in large type (23). They thought it "important" to be able to teach touch typing (39), to write manuscript clearly (43), to operate audiovisual aids for lessening the amount of close eye work (48), and to have a knowledge of type faces and sizes of print (50).

The successful teachers considered a knowledge of the methods of teaching the socially and emotionally disturbed child (35) "very important." They placed a knowledge of the methods of teaching the mentally retarded (73) and the gifted (74) rather low on the "important" list. In the "less important" classification they placed a knowledge of the methods of teaching the blind (84) and the cerebral palsied (85). Raw data show considerable difference of opinion on competencies in teaching other exceptional children. Since this difference may result from the varying school situations of the participating teachers, we should not conclude that the teachers minimized the importance of meeting the educational needs of other exceptional children.

Knowledge of professional literature on the education and psychology of the partially seeing (38) was "important" to the respondents. Understanding the findings of research studies bearing on the education, psychology, and social status of the blind (81) was placed much farther down on the "important" list. This perhaps implies that the participating teachers were



Courtesy Special Education Department, Detroit Public Schools

The classroom is equipped with a large type dictionary.

more concerned with the partially seeing and thought that the problems of the blind were less pertinent to their immediate responsibilities.

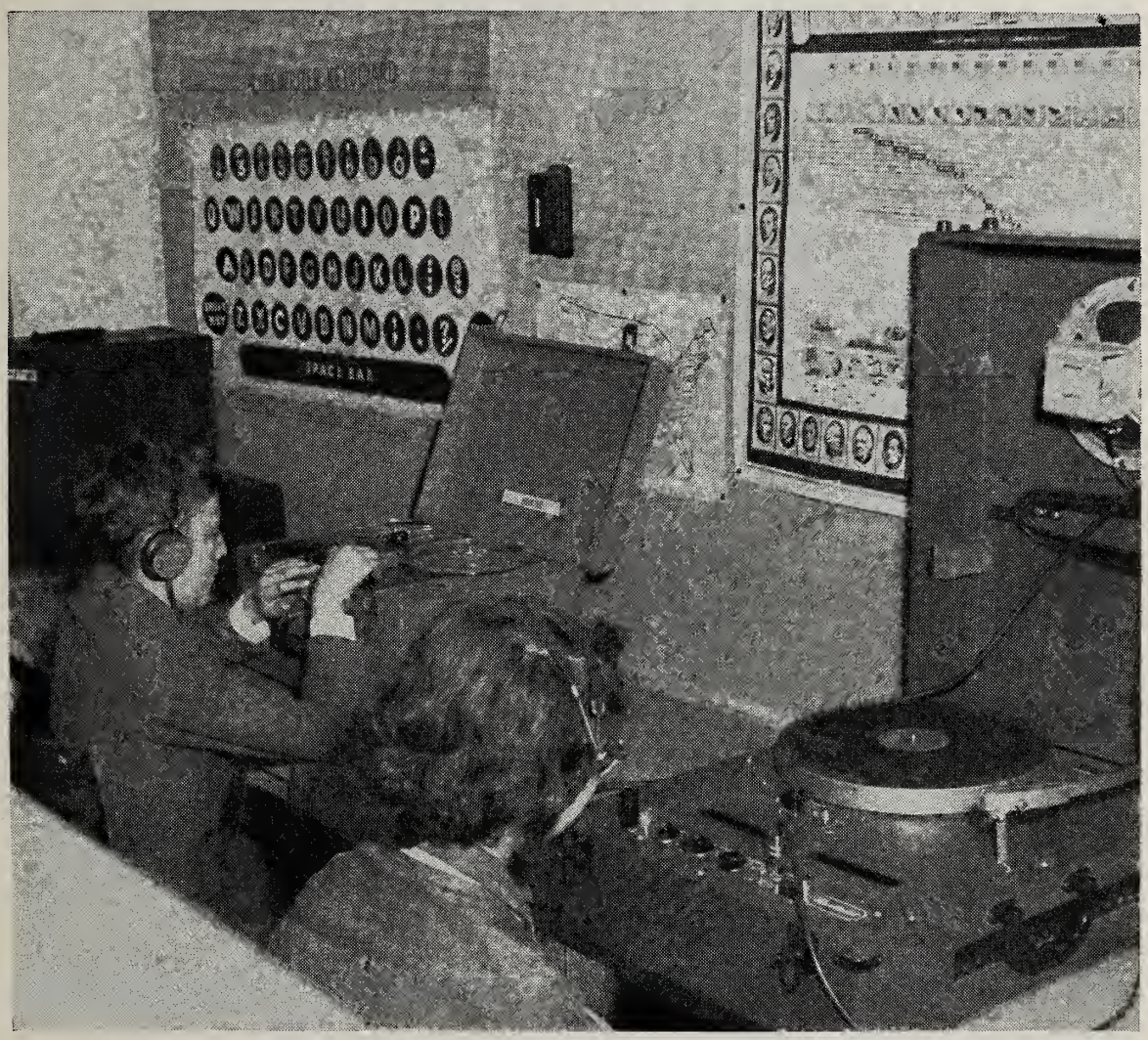
Competencies in interpersonal relationships with other teachers in the school and adults in the community were rated high. The participating teachers placed near the top of the "very important" competencies the ability to cooperate with regular teachers in planning schedules so that the partially seeing pupils might participate in the total activities of the school (3). They considered it "very important" for the teacher to cooperate with other special teachers in adopting and developing an integrated program for each partially seeing child (11) and to work as a member of a team with other professional personnel, such as medical and psychological, in planning a program suited to the needs and abilities of the partially seeing (36).

The teachers thought it "very important" to help the *parents* of partially seeing pupils understand and deal with their child's limitations and potentialities (19), with social and emotional problems which may arise from having a partially seeing child in the family (27), and to help them with the child's school placement (30). They considered it "important" to help parents get information from clinics and agencies serving the partially

seeing (52), to assist parents with their child's occupational placement (53), and to participate in parent-school activities (60).

The teachers also thought it "very important" to be able to interpret the special needs of partially seeing children to administrators, supervisors, and other school personnel and also to the general public (17). They considered it "important" to have knowledge of organizations concerned with partially seeing children such as the National Society for the Prevention of Blindness and the International Council for Exceptional Children (62). The evaluations imply that responsibilities of teachers of the partially seeing extend beyond the classroom into the community.

Competencies concerned with overall supervisory responsibilities were considered valuable. The teachers thought it "important" to be able to recognize signs and symptoms of vision impairment in the general school population (42); to contribute to community leadership in justifying, establishing, and developing an educational program for partially seeing pupils (55); to work with architects and school administrators in planning and securing special



Courtesy Rock Island, Ill., Public Schools

These pupils learn to compensate for a vision loss.

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school building features benefiting partially seeing pupils (64); and to know State and local laws pertaining to the education of the partially seeing (65).

The successful teachers apparently think that they, as well as the supervisors, should share the leadership role. The group concerned with teachers of partially seeing children at the final Work Conference [8] suggested that such a leadership role would necessitate familiarity with State and local laws and the ability to assist in setting standards for an adequate visual environment for *all* children as well as for the partially seeing.

Distinctive personal characteristics as well as specialized knowledge and skills were highlighted by the successful teachers. Only 2 of the 87 competencies listed in the inquiry form referred to personal competencies. These were the ability to enunciate clearly and pronounce correctly (18) and the ability to see normally (37). These competencies were considered "very important."

There were two other opportunities in the inquiry form for the participating teachers to express opinions on personal characteristics.[9] First, they were asked whether teachers of partially seeing children needed personal characteristics different in degree or kind from those required of teachers of normal children. Of those who reported experience with both normal and partially seeing children [10] and who therefore had some perspective in the matter, 100 teachers answered "yes," 16 answered "no," and 7 made no reply.

Second, the participating teachers were asked to list and comment on personal characteristics. In an effort to identify these qualities, the teachers used certain words repeatedly; for example, 31 teachers mentioned "patience," 27 "understanding," 17 "cooperation," and 12 "sympathy." From 4 to 10 teachers used the words "imagination and initiative," "emotional stability," "tact," "kindness," "adaptability," "love of children," "enthusiasm," "physical fitness," "sense of humor." In addition, comments of many other teachers implied that these qualities were important.

To merely list these characteristics would not reflect the full meaning of the teachers' comments. Patience, for example, seemed to mean

> keeping the objective in mind with firmness to accomplish necessary tasks
> the ability to inspire each individual child to make a personal success of his life
> the ability to encourage the children to surmount obstacles which they thought were insurmountable.

The words "understanding" and "sympathy" were generally used in relation to problems created by the handicap, as indicated by the following:

> sympathy, understanding, and appreciation of handicapped persons
> understanding of individual problems arising from physical, emotional, or social problems.

The teachers have a broad concept of the meaning of "cooperation."

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[8] Called by the Commissioner of Education to review the findings from the study (October 1954).

[9] See appendix D, inquiry form EXC-4G, question 6.

[10] Of the 130 participating teachers, 123 reported teaching experience with both normal and partially seeing children.

They think it should extend to all school staff members and to parents and professional people in the community. To quote the teachers:

> ability to establish high professional relations within the school
> be cooperative and have the ability to work well with all school personnel
> ability to gain full cooperation and to give cooperation herself
> willingness to give much time to talk with parents and others who are also working with the student.

The characteristics "resourcefulness" and "adaptability" were considered essential, as shown by the following free responses:

> Teachers of partially seeing children should be resourceful, flexible, and able to make changes readily and comfortably.
> Resourcefulness and versatility in planning and providing materials. Flexibility in (1) changing methods and techniques to suit the needs of the pupils; (2) changing plans at short notice when necessary.
> Ability to teach a variety of grades and subject matter.

One teacher has summed up several important competencies in the following words:

> Treat the handicap matter-of-factly. Help the child to understand it. Teach the importance of good general health and encourage him to function to the height of his abilities. Train the ear, the heart, and the spirit so that even the impaired eye will have a "twinkle."

COMPARISON OF COMMITTEE AND TEACHER OPINION

The opinions of the committee and the 130 superior teachers on competencies for the most part tend to reinforce each other, although they were secured through different techniques. Both the committee and the teachers thought the scope of the work of the special teacher required not only certain personal characteristics and specialized teaching competencies, but also a working knowledge of closely related fields. This includes knowledge of medical conditions; ability to help the child with his personal adjustment; tests and methods used in evaluating the child; providing an adequate curriculum, teaching techniques, and materials (including other areas of exceptionality); knowledge of professional literature; interpersonal relationships; overall supervisory responsibilities; and personal characteristics of the teachers. In all of these fields some competencies were emphasized by both groups, while other competencies were clearly emphasized by only one group, either the committee or the teachers.

Knowledge of medical conditions.—Both the committee and the teachers indicated that teachers of partially seeing children should know about anatomy, physiology, pathology, and hygiene of the eye in relation to the adjustment of the child and his educational program. Both groups thought teachers should understand the functions of such specialists as ophthalmologists and optometrists. The participating teachers considered it "very

important" to recognize eye fatigue and other conditions among partially seeing pupils which suggest the need for referral to medical personnel. This emphasis may imply an understanding of deviation in the child's behavior as well as changes in the appearance of his eyes.

Pupil adjustment.—Both groups considered the ability to help the child with his total personal development one of the most important competencies for the teacher of partially seeing children. The participating teachers emphasized the ability to create a classroom atmosphere conducive to good mental health which, for example, would draw out the shy child. They also indicated the necessity for the teacher to have skill in counseling partially seeing children. They rated as "very important" their own ability in counseling the partially seeing child on his personal attitudes toward his physical handicap, his social problems, and his life goals. The committee, in other words but in a similar vein, pointed to the teacher's function in helping the child with his personal adjustment. For example, the committee indicated that the special teacher should be able to help the pupil gain insight into his assets and limitations. Such counseling skills were probably stressed because the teacher's daily association with the child places her in a strategic position to help him in this way.

Evaluation of the child.—In general, both the committee and the teachers recognized the value of skill in using the various kinds of tests and records. Both groups considered it essential for the teacher of partially seeing children to be able to make educational interpretations from medical records and to have ability in developing and using cumulative records. The participating teachers considered the ability to make interpretations from psychological and social records as "very important."

A knowledge of standardized tests in large type and skill in giving and interpreting vision-screening tests were identified by the committee as competencies which the teacher should have. While the average evaluation of the 130 teachers does not indicate a high rating of these items, raw data show considerable variation in their opinions. In order to make the best use of the child's potentialities and to know the best techniques and materials for instructing him, teachers should know the results of group tests and tests of auditory and visual acuity. The question arises as to how much skill special teachers should have in these competencies. The need for these skills is generally determined by the resources of the school system and the community in which the special teacher is employed.

Curriculum, teaching techniques, and materials.—Both the committee and the teachers emphasized the need for providing a curriculum for the partially seeing child which is an integral part of the regular school curriculum and activities, but which is sensitive to and provides for the varied needs of partially seeing children. The committee thought special teachers should have the ability to bring about a definite articulation between the ele-

Courtesy Special Education Department, Detroit Public Schools

This child's teacher provides special materials.

mentary and secondary school levels in organizing and administering programs for partially seeing children.

Professional literature.—Both the committee and the teachers agreed that it was "important" for special teachers to have knowledge and understanding of the significant literature bearing on the education and psychology of partially seeing children.

Interpersonal relationships.—Both the committee and the responding teachers agreed that there should be a close working relationship between teachers of partially seeing children and other teachers in the school, with professional workers in the community and with parents. Both groups regarded it as essential for the special teacher to work with other teachers in planning schedules and activities for partially seeing children. By means of such cooperation these children become a part of the total school program while their special needs are being met. The committee mentioned further that teachers of partially seeing children should take the initiative in making the necessary adjustments.

Both the committee and the teachers considered it necessary for the special teacher to work as a member of a team with such persons as ophthalmologists, social workers, and psychologists in order to best serve the needs of partially seeing children. They further agreed that the special

teacher should be proficient in interpreting to the community the needs of partially seeing children. The committee put particular emphasis on the teacher's knowledge of community agencies and clinics which may serve the partially seeing child and his family.

Both the committee and the teachers emphasized the special teacher's role in working with parents. The committee stressed the need for making interpretations to parents of such material as the results of screening tests and the recommendations of school principals, ophthalmologists, and psychologists. The participating teachers emphasized a direct parent-counseling relationship. For example, they considered it "very important" to have the ability to help parents understand the child's limitations and potentialities and to assist them in handling his social and emotional problems and his school placement.

Overall supervisory responsibilities.—Both the committee and the 130 participating teachers showed concern for all children with eye defects. They agreed that the special teacher should be able to recognize symptoms which indicate visual impairment in the general school population. Again, they agreed that the special teacher should have a knowledge of the various types of programs for partially seeing children and how to evaluate them in terms of the individual needs of the children and the community resources. Both groups recognized skill in assisting with the organization and administration of various programs for partially seeing children as a valuable competency.

Personal characteristics of the teacher.—Both the committee and the participating teachers thought teachers of partially seeing children and youth should have certain distinctive personal qualities. They stressed patience, understanding, cooperation, resourcefulness, and adaptability. Both recognized the necessity of good health, a wholesome well-adjusted personality, and a sense of humor. They considered normal vision and good speech very important. The committee pointed out that although these characteristics are needed by all teachers they are needed in greater measure by teachers of partially seeing children because of the social and emotional problems arising from a physical handicap.

One is impressed with the emphasis given by both the committee and the teachers to personal characteristics necessary for "cooperation." The committee stated that teachers of partially seeing children should possess friendly, cooperative feelings toward others in order to participate in and appreciate the teamwork required for a flexible on-going program. There is no doubt that both the committee and the teachers believe that teachers of partially seeing children, in order to be effective, must have distinctive personal characteristics as well as specialized knowledge and skills.

PROFICIENCY OF SOME TEACHERS

IN AN EFFORT to obtain information on the effectiveness of some teachers of partially seeing children opinions were collected from *two* sources. One source was the superior teachers who evaluated their own proficiency on all the competencies which they evaluated for importance. The rank order [1] of their proficiency ratings follows each of the competencies in table I, on page 18. For example, the symbol (P, 5), occurring after the first competency item, indicates that this competency received the fifth highest average rating of proficiency.

The other source of information was the State and local supervisors of special education programs who have responsibility for partially seeing children. The directors and supervisors gave their opinions by answering a series of questions on the effectiveness of recently prepared teachers. This information provides clues to the way in which some teachers are meeting the needs of partially seeing children.

AS APPRAISED BY TEACHERS

Did the participating teachers tend automatically to rate themselves high in the same competencies as they evaluated as "very important"? To answer this question, a random sampling of 10 items was analyzed to find the relationship between each individual teacher's rating of importance of the competency and her self-rating of proficiency. A moderate but varying relation between ratings of importance and self-rating of proficiency was found.[2] In other words, there was no marked tendency for a teacher to rate herself "good" in competencies which she had valued as "very important."

The preceding discussion was concerned with the correspondence (covariation) between a teacher's rating of her proficiency on a competency and her evaluation of the importance of the competency. In addition the *average* of teachers' ratings of proficiency on each competency was compared

[1] See appendix C for a detailed description of how these rank orders were derived.

[2] Covariation was measured by the coefficient of contingency. See appendix C for a description of the statistical procedure and a summary of the results. The median coefficient of contingency of these items was 0.39, with a range from 0.25–0.59.

with the *average* rating of importance of each competency. On each of 20 competency items there was a statistically significant difference between the teachers' average rating of importance in the item and their self-rating of proficiency.[3] These items can be identified in table I by the symbol *sd*. As will be seen these 20 competency items received various ratings of importance and therefore will have varying degrees of practical significance. Differences occurred in both directions. On some competencies teachers as a group rated the importance of the competency higher than their proficiency in it. In other instances the reverse was true. Discretion should be used in interpreting and applying these findings until more can be learned about the reasons for the differences. In the following 9 competency items the teachers' average ratings of *importance* were *greater* than their average ratings of self-proficiency:

Rank order [1]	*Competency*
4	A knowledge or understanding of social and emotional problems arising from partial loss of vision.
29	The ability to counsel partially seeing children on their vocational problems and life goals.
34	The ability to develop interests of partially seeing pupils and guide them into hobbies, diversional interests, and clubs suited to their abilities.
35	A knowledge or understanding of the methods or techniques of teaching the socially or emotionally disturbed child.
41	A knowledge of vocational problems arising from partial loss of vision.
53	The ability to help parents of partially seeing pupils with their child's occupational placement.
64	The ability to work with architects and school administrators in planning and securing special school building features and special equipment for partially seeing pupils.
82	The ability to administer screening tests of auditory acuity to partially seeing pupils.
86	The ability to teach industrial arts to partially seeing pupils.

[1] The numbers represent the rank order of importance as shown in table I.

The competencies listed above are mainly concerned with the adjustment and growth of the partially seeing child, his vocation, and the special skills of the teacher. The fact that superior teachers have recognized some lack of proficiency in these competencies may indicate a corresponding lack in other special teachers. This information may be of value to teachers themselves as well as to directors, supervisors, and college personnel concerned with exceptional children. The individual teacher's goals for professional growth may be affected by the analysis she makes of her own proficiency in the nine competencies as well as in all the competencies in table I. Direc-

[3] Differences were considered to be significant if the probability of occurrence was registered at the .01 level or less. See appendix C for detailed description of the statistical procedure employed.

tors may wish to give consideration to the nine competencies for inservice planning. College personnel may wish to review their efforts in preparing special teachers in these competencies.

On the following 11 competency items teacher ratings of *importance* were *lower* than their ratings of *self-proficiency:*

Rank order [1]	*Competency*
46	The ability to develop and use individual cumulative records of partially seeing pupils.
49	The ability to teach partially seeing pupils to use a phonetic attack in word recognition.
50	A knowledge or understanding of type faces and sizes of print.
51	A knowledge or understanding of differences in the functions and responsibilities of ophthalmologists, optometrists, and opticians.
58	A knowledge or understanding of anatomy and physiology of the eye.
60	The ability to participate in parent-school activities.
61	A knowledge or understanding of causes of the various conditions which result in partial vision.
62	A knowledge or understanding of purposes, services, and locations of national organizations concerned with the education and general welfare of the partially seeing, such as the International Council for Exceptional Children and the National Society for the Prevention of Blindness.
63	The ability to do lettering.
76	The ability to administer group achievement tests to partially seeing pupils.
78	A knowledge or understanding of the history of education of the partially seeing.

[1] These numbers represent the rank order of importance as shown in table I, page 18.

The competencies listed above are mainly concerned with teaching skills, understanding the partially seeing child's eye condition, and parent-school relationships. The fact that superior teachers gave a lower rating to the competence than to their proficiency would appear to have implications for both preservice and inservice professional preparation. The findings seem also to have implications for directors of special education in local communities. Has too much emphasis been given these competencies in relation to the total program? Do special teachers have access to records, reports, and tests concerned with the partially seeing child, which are necessary to them in making the best use of their special competencies? Could directors of special education give inservice teachers more opportunities to use their specialized knowledge? For example, could the teachers of partially seeing children, during teachers' meetings of the school, explain certain phases of anatomy and physiology of the eye or the causes of various eye conditions? Could the teachers of partially seeing children be given, or encouraged to take, more initiative in parent-teacher activities?

AS APPRAISED BY DIRECTORS AND SUPERVISORS

In response to a series of questions[4] directors and supervisors from State departments of education and from local school systems expressed some opinions on the effectiveness of teachers with recent preparation in the area of the partially seeing. Their opinions are summarized in graph 1 on page 35. The 45 State and 62 local directors answered "yes," "no," or "undecided." The percentage of affirmative answers is shown in the graph and will be discussed briefly. Statistics on the number of negative and undecided replies are not included in this report. The reader may wish to know that about 20 percent of the directors and supervisors were "undecided" about the proficiency of their teachers on these questions.

The questions centered on some of the competencies which the participating teachers rated, including orientation of teachers to other areas of exceptionality; understanding the child; developing curriculum and using distinctive teaching methods and aids; interpreting and using educational, psychological, and medical reports; identifying causes of social and emotional maladjustment; understanding of community agencies and services for the visually handicapped.

Neither group, as reference to graph 1 shows, expressed a high degree of satisfaction with the proficiency of their recently prepared teachers, but the local directors and supervisors were somewhat better satisfied than the State directors and specialists.

With one exception, the local personnel gave more affirmative replies than the State personnel. Only 34 percent of local personnel as compared with 51 percent of State directors thought that teachers of partially seeing children had adequate orientation to other areas of exceptionality. This relatively low evaluation seems to point to an area for further study, for it may reflect an inadequacy in professional preparation. It will be recalled that the committee report emphasized the importance of the special teacher's skill in working with partially seeing children who have other handicaps.

While 76 percent of the local supervisors thought the special teachers had an adequate understanding of the basic principles of child growth and development, only 48 percent of the State directors agreed with them.

The teachers' proficiency in curriculum development suited to the child's needs and the use of distinctive methods and aids of teaching were viewed more favorably by local personnel than by State personnel—with one

[4] For complete questions, see appendix D. (Inquiry forms EXC-1 and 3, question 4.)

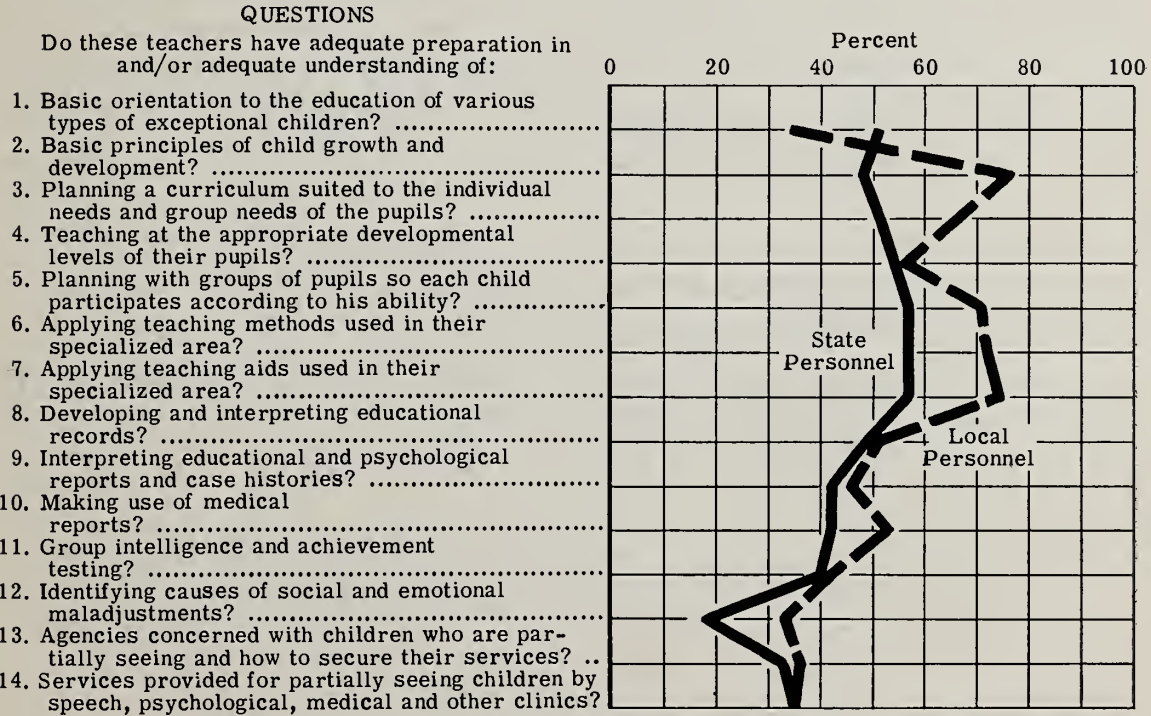
exception. Only about half of both groups (54, 90 and 56, 90) thought the special teachers were able to instruct at the appropriate developmental levels of their pupils.

On the teachers' ability to interpret and use educational, psychological, and medical reports, there was fairly close agreement between the State and local personnel. On items 8, 9, and 10 from 42 percent to 53 percent expressed satisfaction.

Neither the State nor the local group felt that the special teachers were effective in identifying causes of social and emotional maladjustment (18 percent of State directors and 33 percent of local supervisors). It will be recalled that although teachers considered an understanding of social and emotional problems of partially seeing children among the most important of all the competencies (table I), their self-appraisal indicated that they felt some lack of proficiency. Does this suggest a place for improvement in teacher preparation courses and the need for additional assistance for inservice teachers?

Both State and local directors show a small degree of satisfaction (about 35 percent) with teachers' competencies in using community agencies and clinics that serve visually handicapped children. This raises the question: Do teacher preparation courses give sufficient emphasis in these areas, for example by means of field trips?

Graph 1.—Percent of directors and supervisors in State and local school systems satisfied with the competence of recently prepared teachers of partially seeing children in their school systems.



[1] Only the affirmative replies are shown on this graph; the remaining replies were divided between negative and undecided. See appendix C, p. 59, for additional information.

The findings presented in the earlier part of this publication (see table I, p. 18) indicated that all the competencies covered by the 14 questions were considered valuable for the teacher of the partially seeing. The fact that only about half of their directors and supervisors considered them sufficiently proficient in some of these competencies may be cause for concern. What can be done to help the teacher in her efforts to become more effective? Much of her competency is acquired through her own initiative and resourcefulness and through the assistance of State and local supervisors of special education. Much is also obtained through the organized professional programs of colleges and universities.

EDUCATION AND EXPERIENCES CONTRIBUTING TO PROFICIENCY

IF, as it is hoped, the most essential knowledge and abilities have been identified in the preceding pages, the next question is, "What kind of education and experience will help develop an effective teacher of the partially seeing?" In answer to this question this section reports opinions on: (1) The value of certain practical experiences in the professional preparation of teachers of the partially seeing; (2) the amount of student-teaching with partially seeing children thought to be desirable; (3) the amount of teaching experience with the so-called normal children thought to be desirable; and (4) professional background for teacher candidates most likely to succeed.

PRACTICAL EXPERIENCES IN PROFESSIONAL PREPARATION

How do teachers value some of the practical experiences which are usually included in teacher education programs? A list of typical experiences [1] was presented in the inquiry forms to the 130 teachers of the partially seeing for rating as to relative importance. On an average, 104 of the 130 teachers rated each experience. These experiences, arranged in rank order according to average ratings of importance, may be found in table II on page 38.[2]

Teachers attached much value to all 18 practical experiences. They gave an average rating of "very important" to 5 experiences and "important" to the remaining 13. They recognized, as table II shows, that their professional preparation should include a wide range of practical experiences. Those which the teachers valued most highly were: planned observation in special schools or classes for partially seeing children (1)[3]; student-teaching

[1] See appendix D, inquiry form EXC–4G, question 5.

[2] The rating scale was identical with the one used by the 130 teachers in evaluating the competencies in table I: "very important," "important," "less important," and "not important."

[3] Numbers in parentheses are rank order of importance as shown in table II, page 38.

Table II.—Practical Experience in Specialized Preparation, as Rated by 130 Teachers

Rank order [1] of importance	Experiences
	Items rated VERY IMPORTANT (1–5)[2]
	Planned observation—
1	in special schools or classes for partially seeing children
	Supervised student teaching of partially seeing children—
2	at the elementary level
	Experiences in drawing educational interpretations from—
3	ophthalmological and other medical reports
4	Supervised student teaching of normal children
	Experiences in drawing educational interpretations from—
5	psychological reports on partially seeing children
	Items rated IMPORTANT (6–18)
6	Student observation (without active participation) of teaching of partially seeing children
	Experiences in drawing educational interpretations from—
7	cumulative educational records on partially seeing children
	Planned observation—
8	of multiprofessional case conferences of representatives from such fields as medicine, psychology, education, and social welfare, to study and make recommendations on individual partially seeing children
9	of ophthalmological specialists
10	of conferences of teachers of the partially seeing on pupil placement, curriculum adjustment, child study, and so on
	Experiences in drawing educational interpretations from—
11	reports of social workers on partially seeing children
	Supervised student teaching of partially seeing children—
12	at the secondary level
	Planned observation—
13	of children with multiple handicaps, including a partial loss of vision
14	at rehabilitation centers for partially seeing youths and adults
15	Visits to the homes of partially seeing children in the company of supervising teachers
	Planned observation—
16	at non-school community organizations offering services to the partially seeing, such as recreational groups, clubs, and community houses
17	in schools or classes dealing with other types of exceptional children
	Supervised student teaching of partially seeing children—
18	at the nursery school level

[1] See appendix C for a detailed description of the statistical procedures used to determine the rank order of importance of the 18 experiences.

[2] None of the items received an average rating of "Less Important" or "Not Important."

of partially seeing pupils at the elementary level (2); experiences in drawing educational interpretations from ophthalmological records (3); and student-teaching of normal children (4).

They considered student-teaching of partially seeing children at the elementary level (2) more essential than at the secondary (12) or nursery school level (18). It should be recalled that most of the teachers participating in this study were elementary teachers. Throughout the country there are more provisions for partially seeing children at the elementary than at the secondary level. Partially seeing children are not apt to need special attention at the nursery school level since they do not use their eyes for close work at that time.

Judging from the teachers' emphasis on experience in drawing educational interpretations from ophthalmological reports (3); from psychological reports (5); and from educational records (7); opportunity for these experiences should be included in the specialized preparation.

Opportunities to observe teachers and other specialists at work were consistently stressed by the teachers. They rated the following high: planned observation of multiprofessional conferences (8), of ophthalmological specialists (9), and conferences of teachers of the partially seeing (10). As the reader will recall, throughout the study the ability to work as a member of a team has been highlighted as a distinctive competence. These teachers think their college preparation should initiate them in this process.

Although the teachers' first concern is with experiences which prepare them to work in the classroom and as a member of a professional team, they also think it helpful to visit community agencies concerned with partially seeing children (14 and 16), to visit the homes of these children (15), and to observe children with other handicaps in addition to partial vision (13 and 17).[4]

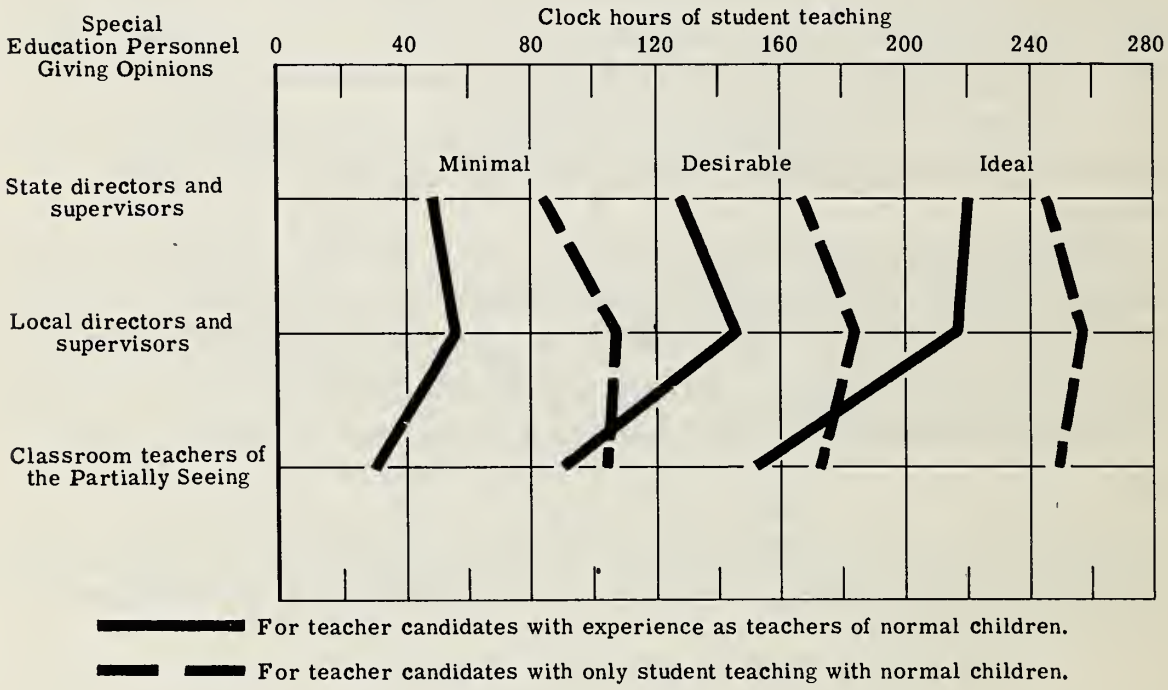
[4] Teachers were given an opportunity not only to rate these experiences, but also to report the emphasis placed on them in their own specialized preparation. Unpublished data show that a fairly high proportion of teachers reported that their college preparation did not include these 5 experiences (13 through 17).

STUDENT TEACHING OF PARTIALLY SEEING PUPILS

How much student-teaching with partially seeing children should be required in the preparation of a teacher in this area? Opinions were gathered from the participating teachers, from State directors, and from local directors.[5]

The three groups of special education personnel were given identical questions.[6] They were instructed to indicate on an interval scale the number of clock hours of specialized student-teaching considered "minimal," "desirable," and "ideal," for two types of teacher-candidates: (1) Those who have had on-the-job teaching experience with normal children, and (2) those who have had only student-teaching experience with normal children. Their opinions are shown in graph 2.

Graph 2.—Amount of student teaching with partially seeing children needed by teachers preparing to work in this area (expressed in medians)



Examination of the graph shows that all three groups of educators would require less student-teaching in the specialized area for the first candidate than for the second. The participating teachers thought the "desirable" amount of student-teaching for the candidate with on-the-job teaching experience of normal children should be 91 clock hours; the State personnel,

[5] The number of college instructors reporting was too small to be considered here.

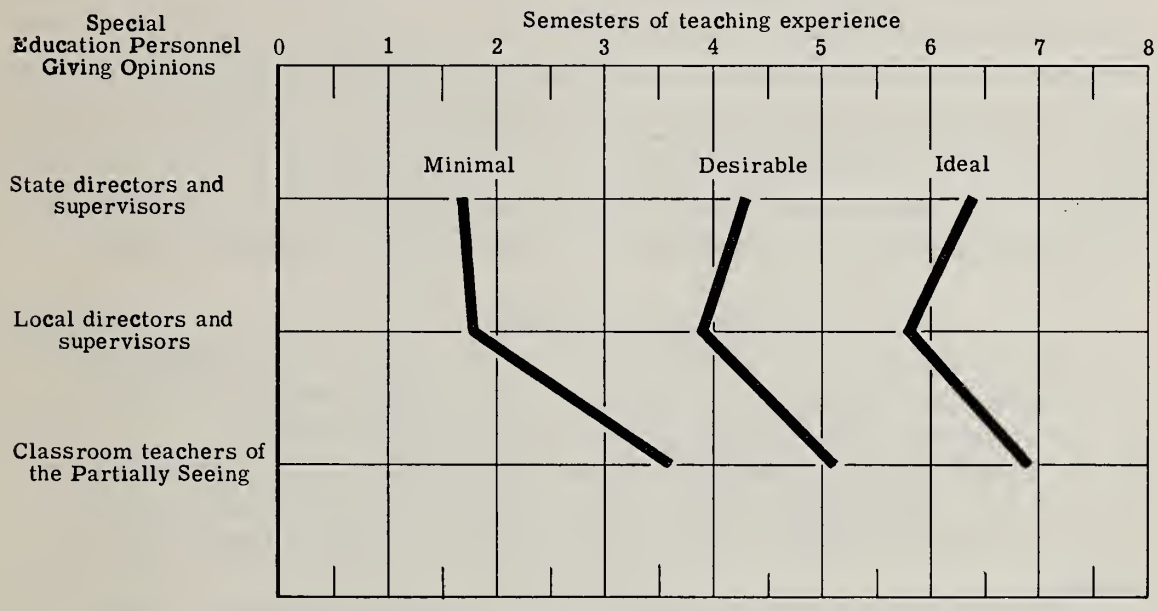
[6] See appendix D, page 60, inquiry forms EXC–1 and 3, questions 5.2 and 5.3; and inquiry form EXC–4G, question 12. *See also* appendix C, page 58, for percentage of each group selecting minimal, desirable, and ideal number of clock hours of student teaching with partially seeing pupils.

128 clock hours; and the local personnel, 146 clock hours.[7] There is closer agreement among the three groups of special educators regarding the "desirable" amount for the student-teacher (inexperienced) candidate: the participating teachers would require 173 clock hours, the State personnel 167 clock hours, and the local personnel 184 clock hours.

TEACHING EXPERIENCE WITH NORMAL PUPILS

Should teaching experience with normal children be a prerequisite for a person preparing to teach the partially seeing? If so, how much should the candidate have? Opinions on these questions were collected in the same manner and from the same groups that reported on student-teaching.[8] Their views are reported in graph 3.

Graph 3.—Amount of classroom teaching experience with normal children needed by teachers of the partially seeing (expressed in medians).



(Less than 2 semesters of teaching experience refers to student teaching.
More than 2 semesters of teaching experience refers to on-the-job classroom teaching.)

Minimal, desirable, and ideal requirements are based on the average (median) opinion of each group of special educators. Individual respondents were given a choice which ranged from one semester of half-time student teaching with normal children to three years of on-the-job classroom teaching with normal children. Less than two semesters refers to student teaching; more than two semesters refers to on-the-job classroom teaching experience. See appendix C for further information.

[7] These statements on "desirable" requirements are based on the average (median) opinion of each group of special educators. Individual respondents actually were given a choice of the four 75-hour intervals ranging from 1 to 300. Although the choices of "none" and "more than 300" were also given, very few persons indicated these in their replies. However, there was one notable exception: 20 of the superior teachers checked "none" as an acceptable "minimum" for a teacher-candidate who had regular teaching experience.

[8] See appendix D, page 60, inquiry forms EXC-1 and 3, question 5.1, and inquiry form EXC-4G, question 11. *See also* appendix C, page 59, for percentage of each group selecting minimal, desirable, and ideal amount of teaching with normal children.

As the graph shows, all participants think that on-the-job teaching experience with normal children is needed. Of the three groups of special educators the participating teachers set highest requirements. As a desirable amount, they would require 5.1 semesters, the State personnel 4.3 semesters, and the local personnel 3.9 semesters.[9]

PROFESSIONAL BACKGROUND FOR TEACHER CANDIDATES MOST LIKELY TO SUCCEED

On the hypothesis that certain combinations of academic preparation and experience tend to contribute to success in teaching, an item in the inquiry form described six hypothetical candidates with different combinations of academic preparation and experience.[10] Directors and supervisors in State and local school systems and college instructors with responsibility in the area of the partially seeing were asked to choose the two candidates most likely to succeed.

One or more of the following elements were included in each of the six combinations: (1) graduate or undergraduate program of study; (2) general teacher preparation—including student-teaching; (3) specialized preparation—including student-teaching; (4) teaching experience. The descriptions of the qualifications of six hypothetical candidates and the percentage of educators selecting the candidate as "most likely to succeed" follow.

Qualification of candidate	*Percent*
A 1-year graduate program of specialized preparation (including student teaching with the partially seeing) for experienced regular teachers holding a bachelor's degree in general teacher education; teaching experience with *normal* children only	67
A 1-year graduate program of specialized preparation (including student teaching with the partially seeing) immediately following the completion of a bachelor's program in general teacher education; *no* teaching experience with *normal* or *partially seeing* children	38
A bachelor's degree in general teacher education, but no specialized preparation; teaching experience with *normal* and *partially seeing* children	29
A 4-year undergraduate program of specialized preparation (including student teaching with normal and partially seeing children); *no* teaching experience with *normal* or *partially seeing* children	20
A bachelor's degree in general teacher education, but no specialized preparation; teaching experience with *normal* children only	4
A bachelor's degree in general teacher education (including student teaching of normal children); *no* teaching experience with either normal or *partially seeing* children	3

The highest proportion of specialists chose the candidate holding a regular teaching credential, with experience in teaching normal children,

[9] This is based on the average (median) opinion of each group of special educators. Individual respondents actually were given 6 choices, ranging from "no teaching of normal children" and "one semester of ½-time student-teaching" to "at least 3 years of on-the-job classroom teaching with normal children."

[10] See appendix D, page 60, inquiry forms EXC–1, 2, and 3, question 6.

plus a year of graduate specialized preparation including student teaching of partially seeing children. The specialists' second choice was for the candidate with the same qualifications but with *no* teaching experience. The three groups may favor graduate level because they think it hardly possible for a candidate to obtain a sufficient background of knowledge and skills during the undergraduate program. The fact that all three groups of special educators prefer the candidate who has on-the-job teaching experience with normal children as well as graduate specialized preparation may encourage those regular grade teachers who are looking for a change of professional activity. This is a source from which many fine special education teachers have come.

SUMMARY AND IMPLICATIONS

ALTHOUGH special provision must be made for the education of the partially seeing, the program offered should be an integral part of the regular school curriculum, approximating the normal as closely as possible.

There is a variety of ways of educating partially seeing children, depending upon the individual child, the school system, and the community resources. This suggests the necessity for regularly recurring evaluations of the services and programs offered for partially seeing children.

Specialized knowledge, skills, and abilities, over and above those required by the regular classroom teacher, are required by the teacher of partially seeing children—regardless of the type of educational program in which she works.

Distinctive personal characteristics are essential to the teacher's effective work with partially seeing children. Many of these appear to be differences in degree rather than kind. There should be careful screening of candidates in teacher preparation institutions. Personal characteristics should also be considered by State and local organizations in establishing teacher certification requirements.

The personal qualities as well as the professional preparation of the special teacher must be such as to enable her to participate in a continuing educational program to interpret the needs of partially seeing children to the school and to the community.

Teachers of partially seeing children should be able to cooperate with other teachers and administrators in the school. A close working relationship is essential in planning the schedules and activities for partially seeing children.

The special teacher should have skill in working both as a member of a team and individually with such persons as parents, ophthalmologists, school medical advisers, nurses, psychologists, and social workers in order to best serve the needs of partially seeing children.

Medical knowledge as related to the eye is essential to the teacher of partially seeing children, for she should be able to draw educational implications from medical reports. Also very important to this teacher is ability to make educational interpretations from psychological and social reports.

Teachers of the partially seeing apparently need skills in counseling children in making educational, social and emotional adjustments especially as they are effected by their physical limitations.

Practical application of principles and theory in work with partially seeing children, direct experience with materials, and personal contact with consultants and specialists are all very important in the teacher's professional preparation experiences. Although she should have some of these experiences as part of college preparation her professional growth should continue in various activities while doing on-the-job teaching. Highly valued experiences include:

Student teaching of normal children
Student-teaching of partially seeing children
Observation in special schools and classes for the partially seeing
Making educational interpretations from medical and psychological reports.

These findings represent the combined thinking of a group of outstanding specialists throughout the Nation and as such have implications for many groups of special educators. They should, however, be subject to future evaluation in the light of changing conditions.

The implications for *college programs* are that such preparation be given in a community which has available resources in many fields relating to the partially seeing child. This is necessary not only to cover all the aspects of preparation but also to make teacher candidates aware of the various agencies and services in the community which can be used. A further implication is that the college instructor should have much knowledge and experience in the field of the education of the partially seeing and must be able to coordinate the many parts of this specialized preparation.

There are implications for *directors* and *supervisors* in State and local departments of education. Through the leadership of these specialists, the teacher's professional growth can be fostered by means of organized workshops, refresher courses, teacher-supervisor conferences, participation in community activities, professional literature, and membership in professional organizations. In addition, encouragement should be given to teacher-initiated activities and projects.

There are implications for State and local agencies responsible for setting *professional standards* for teachers of partially seeing children and youth. On the basis of the findings, standards would include:

Experience in teaching normal children
Student-teaching of partially seeing children
Distinctive personal characteristics
Specialized knowledge and skills
Specialized practical experiences.

Standard-setting agencies should be certain that colleges from which teacher candidates secure their preparation are: (1) located in communities which have educational resources such as provisions for student-teaching and medical resources such as eye clinics for observation; and (2) adequately staffed to offer courses and to supervise the numerous practical experiences essential to the teacher candidate.

SUGGESTED AREAS FOR RESEARCH

The areas of competence in which directors and supervisors in State and local school systems thought teachers were not sufficiently effective

The role of directors and supervisors in improving the competence of teachers of partially seeing children

Identification of the elements in an adequate inservice program for professional growth of teachers of visually handicapped children

Ways of bringing distinctive educational services to partially seeing children who are geographically isolated

Ways of meeting the needs of partially seeing children who have handicaps in addition to impaired vision

Identification and delineation of supervisory or administrative responsibilities of the special teacher

Further examination of the 20 competency items (see table 1) in which there was a significant difference in the teachers' ratings between the importance and their self-rating of proficiency in the competency

Role of the regular classroom teacher in meeting the educational needs of partially seeing children

The relationship, if any, between the high professional standards and the difficulty of recruiting teachers from college students and regular classroom teachers

The relationship, if any, between the difficulties in recruiting these highly specialized teachers, as described in this publication, and the current tendency toward a single salary schedule

The kinds and number of courses in the medical field which are necessary for effective work with partially seeing children

The scope of the counseling role of the teacher of the partially seeing.

Appendix A.—Office of Education Study *Qualification and Preparation of Teachers of Exceptional Children*

THIS BROAD study on the teachers of exceptional children was undertaken by the Office of Education in collaboration with many leaders in special education from all parts of the Nation, with the special help of the Association for the Aid of Crippled Children, of New York City. It was directed by a member of the Office of Education staff, who was counseled by two committees. One was an *Office of Education Policy Committee*, whose function it was to assist the director in management and personnel aspects of the study. The other was a *National Advisory Committee* of leaders in special education from various parts of the United States whose function it was to help identify the problems, to assist in the development of the design of the study, and to otherwise facilitate the project. The study also had the counsel of a number of consultants who reviewed written material and made suggestions on personnel and procedures. (A complete list of these committee members and consultants appears on page ii.)

The general purpose of the study was to learn more about the qualification, distinctive competencies, and specialized preparation needed by teachers of handicapped and gifted pupils. The term "teachers" was interpreted broadly to mean not only classroom instructors of the various types of exceptional children, but also directors and specialists in State and local school systems and professors of special education in colleges and universities. Separate studies were made of the qualification and preparation needed by teachers of children who are: (1) blind, (2) crippled, (3) deaf, (4) gifted, (5) hard of hearing, (6) mentally retarded, (7) partially seeing, (8) socially and emotionally maladjusted, (9) speech handicapped, or (10) handicapped by special health conditions such as rheumatic fever. Separate studies were also made of special education administrative and supervisory personnel in State departments of education (11), and in central offices of local school systems (12). Still another study (13) was made of instructors in colleges and universities preparing teachers of exceptional

children. Thus, incorporated into the broad project were 13 smaller studies.

Two techniques were used to gather data on the qualification and preparation needed by special education personnel. One was the formation of *committees* to submit statements describing desirable competencies; the other was the use of a series of *inquiry forms*. The plan of the study also provided for conferences of specialists and committee members where practical.

Through the committee technique, reports were prepared on the distinctive competencies required by educators in areas paralleling those studied through inquiry forms. There were 13 such committees in all. The names of these committee members were proposed by the National Committee, and the chairmen were appointed by the U. S. Commissioner of Education. Insofar as possible, a committee in each area of interest was composed of from 6 to 12 leading educators who had engaged in college teaching, had held supervisory positions in State or local school systems, and had classroom teaching experience with exceptional children.

Through the series of inquiry forms, facts and opinions were collected from superior teachers in each of the 10 areas of exceptionality listed above, as well as from directors and supervisors of special education in State and local school systems and from college instructors of special education. By means of these questionnaires, the 13 groups of special educators had opportunity to express their views on the distinctive skills, competencies, and experiences which they considered basic for special educators. Through the inquiry forms, status information was also gathered on State certification requirements for teachers of exceptional children and on existing teacher-education programs for the preparation of these teachers.

Three major conferences on the study were called. In September 1952, private agencies interested in gifted and handicapped children met with the Office of Education staff and the National Committee. In March 1953 the Commissioner of Education called a 3-day conference of the 13 committees preparing reports on the distinctive competencies required by special educators. Working papers incorporating all data collected were presented, reviewed, and modified, at a week-long work conference convened in Washington in October 1954. The occasion provided opportunity for a free exchange of views and for analysis and interpretation of data.

The findings coming from this study, *Qualification and Preparation of Teachers of Exceptional Children*, represent the opinions of approximately 2,000 people rather than the point of view of a single individual or agency. It is hoped they will be an effective contribution toward the goal of increasing the number of educators competent to teach our exceptional children.

Appendix B.—The 130 Participating Teachers of Partially Seeing Children

THE DESIGN of the study called for 100 superior classroom teachers of partially seeing children to supply facts and opinions through an extensive inquiry form. In order to obtain at least 100 completed inquiry forms from teachers who would meet the criteria set by the study, a list of approximately 200 teachers was compiled. An effort was made to secure a representative sampling of superior teachers throughout the Nation by establishing a quota for each State and by providing guidelines for the selection of teachers within each State. State quotas were established with the help of the Research and Statistical Services staff of the U. S. Office of Education. Among the factors considered in establishing the quotas were child population and number of pupils enrolled in special education facilities for the partially seeing in the State.

Guidelines for the selection of superior teachers were prepared with the help of the National Advisory Committee. They specified: (1) That teachers be currently employed as classroom teachers and that they be superior in the opinion of their supervisors; (2) that they have specialized preparation for teaching partially seeing children; (3) that, insofar as possible, teachers be chosen so that about half of the number would have received their specialized professional preparation before January 1, 1946, and the other half after that date; and (4) that the selection be made as widely as possible from various types of teaching situations, such as urban and rural centers, public and private schools.

State departments of education submitted the names and addresses of 200 teachers of partially seeing children. Inquiry forms were sent to all of them; 150 forms were completed and returned. Twenty respondents did not meet the criteria set forth in the guidelines; some were not classroom teachers; others did not have specialized preparation. The forms from the other 130 teachers were collated and data from them are reported in this bulletin.

The inquiry forms completed by the 130 teachers of the partially seeing were grouped, for purposes of tabulation, into two categories: Those filled

in by the 90 teachers who had completed their specialized professional preparation prior to January 1, 1946, and those filled in by the 40 teachers who had completed their specialized professional preparation since that date. Findings are reported for the total 130 teachers since no statistically significant differences [1] of opinion were found between these two groups.

Background information is presented on the school situations in which the 130 participating teachers of the partially seeing were employed and on their visual acuity and professional training. The information should be interpreted with caution; it is not intended to have any program implication, since a study of programs for the education of partially seeing children

Table 1.—School Organization in Which Participating Teachers Were Working, by Type

Type of organization	Number	Percent
Total	**130**	**100**
Special program in a day school where partially seeing pupils are enrolled—		
in special classes, spending little or no time in regular classrooms	15	11
in special classes, spending some of their time, but not more than half, in regular classrooms	65	50
in special classes, spending more than half their time in regular classrooms	29	22
in regular classrooms, spending some of their time in special classes	19	15
A program with no special classes, but special equipment provided for regular classrooms where partially seeing pupils are enrolled. Itinerant special teacher works with regular teacher in consultative capacity	1	1
A program with partially seeing pupils enrolled in regular classes, except for study periods spent in a sightsaving room	1	1

Table 2.—Grade Levels at Which Participating Teachers Were Working

Level	Number	Percent
Total	**130**	**100**
Nursery and kindergarten	0	0
Kindergarten and elementary	3	2
Elementary only	85	66
Elementary and secondary	13	10
Secondary only	26	20
Kindergarten, elementary, and secondary	3	2

[1] See appendix C.

are not within the scope of this project. This information is presented solely because opinions reported can sometimes be better interpreted in the light of the school situations in which the contributing teachers were employed, the grade level at which they were working, or their own professional preparation.

Table 3.—Specialized Preparation of Participating Teachers, by Type of Program

Program	Number of teachers	Percent of teachers
Total	**130**	**100**
Graduate	79	61
Undergraduate	46	35
Inservice training program	3	2
No reply	2	2

Table 4.—Specialized Preparation of Teachers: by Time of Preparation (Before or After Teaching Normal Children)

Time of preparation	Number	Percent
Total	**130**	**100**
Before teaching normal children	25	19
After teaching normal children	100	77
No information	5	4

Table 5.—Specialized Preparation of Teachers: By Time of Preparation (Before or Concurrently With Teaching Partially Seeing Children)

Time of preparation	Number	Percent
Total	**130**	**100**
Before teaching partially seeing children	66	51
Concurrently with teaching partially seeing children	59	45
No information	5	4

Table 6.—Visual Acuity of the Participating Teachers

Visual acuity	Number	Percent
Total	**130**	**100**
Normally seeing	124	95
Partially seeing	4	3
No information	2	2

Appendix C.—Statistical Procedures and Results

STATISTICAL PROCEDURES USED TO ANALYZE DATA REPORTED IN TABLE I

Each of the 87 competencies (knowledge and abilities items) listed in table I was rated in two ways by the 130 participating teachers. First they indicated whether, in their judgment, each item was "very important," "important," "less important," or "not important" in their present position as a teacher of partially seeing children. Second, they showed whether they considered themselves to be "good," "fair," or "not prepared" in each of these competencies.

The *average importance* of each competency was computed by multiplying the number of checks in the "very important" column by 4, those in the "important" column by 3, those in the "less important" column by 2, and those in the "not important" column by 1. The results were added together and divided by the number of checks for that particular item.

The *average proficiency* of the teachers was computed in the same way, using a numerical value of 3.90 for "good," 2.68 for "fair," and 1.46 for "not prepared." These numerical values ("converted scores") were used to make possible a comparison between the ratings of importance on a 4-point scale and the ratings of proficiency on a 3-point scale. They were derived as follows: The average rating of importance was found for all the competencies. This average was 3.35. Then the standard deviation was found for this distribution; it was 0.82. Next, the average rating of proficiency was found for all the competencies, by assigning a value of 3 to the checks in the "good" column, 2 to those in the "fair" column, and 1 to those in the "not prepared" column. This average was 2.55. Then the standard deviation was found for this distribution; it was 0.67. This was done so that the distance of weightings 3, 2, and 1 from 2.55 could be expressed in z-score units. The z-scores of the second distribution were equated to the corresponding z-scores of the first. For example, the z-score for 3 in the distribution of proficiency ratings was found to be $(3-2.55)/.67$, which equals $+0.67$. Using the standard deviation of the first distribution

as a unit, this yields $+0.67 \times 0.82$, or $+0.55$. Adding 0.55 to the mean of the first distribution yields 3.35 plus 0.55, or 3.90. This is the "converted score" assigned to the checks in the "good" column.

A *rank order* of the list of 87 competencies was determined for both the average ratings of importance and the average ratings of proficiency. Consecutive whole numbers were used for ranks even though a few of the items received identical average ratings. This was done so that the rank order number might also serve as an item identification number, and was possible because of the negligible differences between the average of any one item and the next in the list. The items have been arranged in table I, page 18, according to the rank order of importance; the rank order of proficiency is indicated by a symbol at the end of each item, for example (P, 5) appears immediately following item 1 in the table. Rank order numbers and the range of average ratings of the 87 competency items within each category of importance are shown below. Tables with the average rating for *each* competency are available upon request from the Office of Education.

Category	*Range of average ratings*	*Rank order numbers*
Very important (3.50–4.00)	3.51–3.89	1–37
Important (2.50–3.49)	2.53–3.48	38–82
Less important (1.50–2.49)	1.58–2.38	83–87
Not important (1.00–1.49)	.....	.....
Good (3.29–3.90)	3.29–3.84	1–63
Fair (2.07–3.28)	2.21–3.24	64–82
Not prepared (1.46–2.06)	1.62–1.99	83–87

Covariation Between Ratings of Importance and Ratings of Proficiency

The hypothesis that teachers tended to rate themselves most proficient on those competencies which they also rated most important and less proficient on those they rated less important was tested statistically. Because resources for a complete analysis of all the data were not available, and because a complete analysis did not seem necessary, a random sample of 10 competency items was drawn from the list of 87. For each of these items, a "scatter diagram" or "contingency table" was prepared, with the ratings of importance on the X-axis and the proficiency ratings on the Y-axis. The coefficient of contingency for the table was then computed. Where necessary, adjacent categories of importance-ratings were combined, in order to avoid low-frequency intervals (the marginal frequency in any row or column was never allowed to fall below 15). This was desirable in order to obtain a fair and stable value of the contingency coefficient. Most of the contingency coefficients were computed from 3 x 2 tables, though some were computed from 3 x 3, and some from 2 x 2.

The statistical significance of each contingency coefficient was computed using the chi-square technique, with (s—1) (t—1) degrees of freedom,

where s=number of intervals on the X-axis, and t=number of intervals on the Y-axis.

For each contingency table, there was computed not only the actual value of C, but also the maximum value of C obtainable from the set of marginal frequencies characterizing the particular contingency table. This maximum was computed by inserting in one (or more) of the cells of the table the highest possible number consonant with the marginal frequencies and a positive relation between X and Y. Because of the small number of degrees of freedom, the numbers to be inserted in the remaining cells of the table were readily determined by reference to the marginal frequencies and the figures in the cell (or cells) already containing the maximum entry. The coefficient of contingency of the table, thus constructed, was calculated in the usual manner. This maximum coefficient of contingency provides a useful reference-value for the evaluation of the contingency coefficient calculated from the original or empirical table.

Statistical Significance of Differences Between Average Ratings of Importance and Average Ratings of Proficiency

To determine the statistical significance of the difference between the average importance rating and the average self-competence rating on an item, the procedure employed was as follows: The difference between the ratings on importance and proficiency ("converted scores") for each teacher was determined (I_1-P_1 through $I_{130}-P_{130}$, where the subscripts 1 and 130 represent the teachers answering the question). The average difference between the ratings for all teachers was calculated $\left(\frac{\Sigma D}{N}\right)$; the standard deviation

$$\left(\sqrt{\frac{\Sigma D^2}{N}-(M_D)^2}\right)$$

and the standard error of the average of the differences

$$\left(\frac{\sigma_D}{\sqrt{N}}\right)$$

was computed; the average difference was expressed in z-score units $\left(\frac{M_D}{\sigma_{M_D}}\right)$ (this is the "critical ratio"); and the probability of a mean difference as large as or larger than the one obtained for a given item was read from the appropriate table of probabilities. (Reference: Quinn McNemar, *Psychological Statistics*, pages 73–75.) Differences were considered to be significant if the probability of occurrence was 0.01 or less.

In the procedure described above, only *paired* ratings were employed; thus,

if a teacher rated an item for importance, but failed to make a proficiency rating for the item, it was impossible to determine the difference between importance and proficiency of that teacher for that item. The teacher's response to this item was therefore not usable in this calculation. It should be pointed out that *all* teachers' ratings were used in obtaining both the averages for importance and for proficiency on which the ranks in table I are based.

In the case of items for which the difference between the average importance rating and the average proficiency rating (converted scores) was less than 0.20, no test of statistical significance was employed. It was considered that differences smaller than 0.20 were too small to have any *practical* significance. Of those items tested, 20 showed a statistically significant difference between ratings of importance and proficiency. These are indicated in table I, page 18, by the symbol *sd* in the left-hand column, and are discussed on page 31 ff.

STATISTICAL PROCEDURES USED TO ANALYZE DATA REPORTED IN TABLE II

The 130 teachers rated the relative importance of each of 18 experiences by indicating whether, in their judgment, it was "very important," "important," "less important," or "not important" to include the experience in the specialized preparation of teachers of partially seeing children. The *average importance* of each experience was computed by multiplying the number of checks in the "very important" column by 4, those in the "important" column by 3, those in the "less important" column by 2, and those in the "not important" column by 1. The results were added together and divided by the number of checks for that particular item.

A *rank order* of the list of experiences was then determined on the basis of these average ratings of importance. The items have been arranged in table II according to this rank order of importance. The rank order numbers and range of average ratings within each category of importance are shown below. Tables with the average rating for each experience are available upon request from the Office of Education.

Category	*Range of average ratings*	*Rank order numbers*
Very important (3.50–4.00)	3.50–3.63	1–5
Important (2.50–3.49)	2.52–3.42	6–18
Less important (1.50–2.49)	.....	.....
Not important (1.00–1.49)	.....	.....

COMPARISON OF OPINIONS OF TEACHERS PREPARED BEFORE AND AFTER JANUARY 1, 1946

The 130 inquiry forms were tabulated so that the responses of the 90 teachers who had received their specialized preparation prior to January 1,

1946, could be compared with the responses of the 40 teachers who had received their specialized preparation since that date. The differences in opinion expressed by these two groups concerning the importance of the items listed in tables I and II were tested for statistical significance. For each item the average importance rating for the two groups was computed:

$$\left(M_1=\frac{\Sigma fX_1}{N_1}\right)$$

where X_1 represents the ratings of importance of teachers prepared prior to 1946 and

$$\left(M_2=\frac{\Sigma fX_2}{N_2}\right)$$

where X_2 represents the ratings of importance of teachers prepared since 1946. The estimated standard deviation of the universes of which the X_1 and X_2 scores were samples were computed

$$\left(\hat{\sigma}_1=\sqrt{\frac{\Sigma fx_1^2}{N_1-1}} \text{ and } \hat{\sigma}_2=\sqrt{\frac{\Sigma fx_2^2}{N_2-1}}\right);$$

and the estimate of the standard error of the difference between the averages was determined

$$\left(\hat{\sigma}_{M_1-M_2}\sqrt{\frac{\hat{\sigma}_1^2}{N_1}+\frac{\hat{\sigma}_2^2}{N_2}}\right).$$

The observed difference between the averages of the two samples (M_1-M_2) was then expressed in z-score units

$$\left(\frac{M_1-M_2}{\hat{\sigma}_{M_1-M_2}}\right).$$

This is termed the "critical ratio." The probability of an average difference as large as, or larger than, the observed average difference being obtained if we keep drawing samples of the same size from these groups was read from the table of the normal curve ("Proportion of Area Under the Normal Curve Lying More Than a Specified Number of Standard Deviations $\left(\frac{x}{\sigma}\right)$ from the Mean").

No differences were found between the opinions of the two groups on any competency in table I or experience in table II which would be statistically significant at the 0.01 level of probability of occurrence. The raw data, tabulated according to the foregoing categories, are on file in the Office of Education.

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ADDITIONAL INFORMATION ON PROFESSIONAL PREPARATION

The opinions reported in graphs 2 and 3, pages 40 and 41, were expressed in medians. A more detailed report is presented here on these two highly valued experiences: student teaching of partially seeing children and teaching experience with normal children.

Table 7—Percent of Special Education Personnel [1] Indicating Number of Clock Hours of Student Teaching With Partially Seeing Children Needed by Those Preparing To Teach in This Area

Clock hours	For teacher-candidates with regular classroom experience with normal children			For teacher-candidates with only student teaching with normal children		
	Percent of personnel rating			Percent of personnel rating		
	Teacher	State	Local	Teacher	State	Local
Minimal:						
None	27	19	3	3	12	.....
1–75	59	48	63	29	35	24
76–150	9	19	30	49	33	61
151–225	4	10	2	8	9	10
226–300	1	4	2	10	9	5
Over 300	.....	.....	.....	1	2	.....
Number of personnel answering	75	48	62	73	43	62
Median clock hours	30	49	56	104	84	107
Desirable:						
None	4	.....	.....	.....	.....	.....
1–75	38	24	6	1	16	2
76–150	40	38	47	33	24	22
151–225	16	30	39	52	43	59
226–300	2	4	8	12	14	14
Over 300	.....	4	.....	1	3	3
Number of personnel answering	82	47	64	67	37	64
Median clock hours	91	128	146	173	167	184
Ideal:						
None	3	.....	.....	2	.....	.....
1–75	20	2	2	.....	.....	.....
76–150	26	18	10	3	12	.....
151–225	31	32	43	26	21	20
226–300	20	41	43	63	64	71
Over 300	.....	7	2	6	3	9
Number of personnel answering	69	44	60	62	33	54
Median clock hours	152	220	217	249	245	257

[1] Number answering question as a whole: Teachers—117; State—55; local—73.

Table 8—Special Education Personnel[1] Rate Amount of Teaching Experience with Normal Children Needed by Those Preparing to Teach Partially Seeing Children

Teaching experience with normal children	Percent of personnel rating		
	Teachers	State	Local
Minimal:			
None	1	10	9
1 semester, half-time student-teaching	14	29	31
1 semester, full-time student-teaching	9	16	13
1 year of classroom teaching	33	37	36
2 years of classroom teaching	22	6	9
3 years of classroom teaching	19	2	2
More than 3 years classroom teaching	2	.....	.....
Number of personnel answering	87	49	64
Desirable:			
None	2	.....	.....
1 semester, half-time student-teaching	.....	2	5
1 semester, full-time student-teaching	6	16	20
1 year of classroom teaching	14	26	26
2 years of classroom teaching	51	46	42
3 years of classroom teaching	23	10	7
More than 3 years classroom teaching	4	.....	.....
Number of personnel answering	84	50	59
Ideal:			
None	.....	.....	.....
1 semester, half-time student-teaching	.....	.....	3
1 semester, full-time student-teaching	.....	.....	5
1 year of classroom teaching	5	15	19
2 years of classroom teaching	18	24	26
3 years of classroom teaching	61	54	44
More than 3 years classroom teaching	16	7	3
Number of personnel answering	77	46	59

[1] Number answering question, as a whole: Teachers, 128; State, 52; local, 72.

EVALUATION OF RECENTLY PREPARED TEACHERS

The percents shown in graph 1, page 35, are based on the number of persons answering each particular question. Questions 6 and 7 and questions 9 and 10 were combined in the inquiry form filled out by State personnel. In each case the percent of satisfied responses was used twice on the graph to make possible some comparison with the responses of local personnel on these four questions. State personnel evaluated teachers prepared within the 5-year period preceding the study; local personnel evaluated teachers prepared within the 7-year period preceding the study

Appendix D.—Excerpts From Inquiry Forms

I. EXCERPTS FROM INQUIRY FORM EXC–4G FILLED OUT BY TEACHERS OF THE PARTIALLY SEEING

The Office of Education Study
"Qualifications and Preparation of Teachers of Exceptional Children"

INQUIRY FORM EXC–4G: For Teachers of Partially Seeing Children

Miss
Mrs.

1.1 Your name Mr. ..... Date .....

1.2 Your mailing address .....

City (or Post Office) ..... State .....

1.3 Name and location of school in which you teach .....

.....

1.4 Indicate the type of school organization in which you teach by checking ✓ ONE of the following:

.... 1.41 A special program in a day school where partially seeing pupils are enrolled in special classes, spending little or no time in regular classrooms

.... 1.42 A special program in a day school where partially seeing pupils are enrolled in special classes, spending some of their time, but not more than half, in regular classrooms

.... 1.43 A special program in a day school where partially seeing pupils are enrolled in special classes, spending more than half their time in regular classrooms

.... 1.44 A special program in a day school where partially seeing pupils are enrolled in regular classrooms, spending some of their time in special classes

.... 1.45 A program with no special classes, partially seeing pupils enrolled full time in regular classrooms where special equipment is supplied, and where you, as an itinerant special teacher, work directly with regular classroom teachers in a consultative capacity

.... 1.46 Other (specify):

1.5 Indicate the group or groups of partially seeing children which you teach by checking ✓ ONE or MORE of the following:

.... Nursery or Kindergarten .... Elementary .... Secondary

IN PUBLISHED REPORTS, OPINIONS EXPRESSED THROUGH THIS INQUIRY WILL NOT BE IDENTIFIABLE WITH THE NAMES OF THE PERSONS COMPLETING THE FORM

1.6 Indicate the period in which you took the *major* part of your *specialized* preparation which led to your initial certification or approval as a teacher of partially seeing children by checking ✓ ONE of the following:

.... Prior to December 31, 1945 .... Since January 1, 1946

1.7 Indicate by filling in the blanks:

.... Total number of pupils in your class

.... Number of pupils in your class whom you classify as partially seeing

.... Number of pupils in your class whom you classify as blind

1.8 Indicate the plan by which you received the *major* part of your *specialized* preparation in the education of partially seeing children.

(Place ONE check ✓ in the appropriate square below.)

AND

If you have had *additional* preparation by other plans, indicate this by placing X's in the appropriate squares.

Type of program		Prior to on-the-job teaching experience with so-called normal children		After on-the-job experience with so-called normal children	
Program offered at	Level	Prior to teaching partially seeing children	Concurrently with teaching partially seeing children	Prior to teaching partially seeing children	Concurrently with teaching partially seeing children
An accredited [1] *college* or *university* which consisted largely of work taken *during* the regular academic year	Undergraduate				
	Graduate				
An accredited *college* or *university* which consisted largely of work taken at summer school sessions	Undergraduate				
	Graduate				

Other (specify in-service program offered by a school or school system, residential school for the blind, etc.):

1.9 Indicate your visual acuity by checking ✓ ONE of the following:

.... Normal vision .... Partially seeing .... Blind

[1] An accredited college or university is defined by the Division of Higher Education, Office of Education as an institution certified by the American Association of Colleges for Teacher Education, or by one of the regional Associations of Colleges and Secondary Schools.

3. In your present position as a teacher of partially seeing children, how important is it that you possess the following competencies?
(Check ONE ✓ of the four columns on the *left* for each item.)

AND

How do you rate your competency at each of the items listed?

(Check ONE ✓ of the three columns on the *right* for each item.)

Very important	Important	Less important	Not important	Item[2]	Good	Fair	Not prepared
				A knowledge and/or understanding of:			
....	....	....	....	3.1 various types of conditions which result in loss of vision.	....	....	....
....	....	....	....	3.2 causes of the various conditions which result in partial vision.	....	....	....
....	....	....	....	3.3 the general plan of identification, medical treatment of and the prognosis for the various conditions which result in loss of vision.	....	....	....
....	....	....	....	3.4 implications for an educational program of the various types of conditions which result in loss of vision.	....	....	....
				The ability:			
....	....	....	....	3.84 to write in manuscript clearly (teacher's own ability).	....	....	....
....	....	....	....	3.85 to do lettering (teacher's own ability).....	....	....	....
....	....	....	....	3.86 to touch type (teacher's own ability).....	....	....	....
....	....	....	....	3.87 to enunciate clearly and pronounce correctly.....	....	....	....

[List incomplete, see table 1, page 18]

[2] All of the 87 items appearing in table 1 were included in this question in the inquiry form, although not in the same order as in the table.

5. Do you consider the following experiences "very important", "important", "less important", or "not important" in the specialized preparation of teachers of partially seeing children? (Check √ ONE of the four columns on the *left* for each item.)

Very important	Important	Less important	Not important	Item
.....	.....	.....	.....	5.1 Supervised *student-teaching* of so-called normal children
.....	.....	.....	.....	5.2 *Student-observation* (without active participation) of teaching of partially seeing children
				Supervised student-teaching of partially seeing children—
.....	.....	.....	.....	5.3 at the nursery school level
.....	.....	.....	.....	5.4 at the elementary level
.....	.....	.....	.....	5.5 at the secondary level
				Planned observation—
.....	.....	.....	.....	5.6 in special schools or classes for partially seeing children
.....	.....	.....	.....	5.7 in schools or classes dealing with other types of exceptional children
.....	.....	.....	.....	5.8 of children with multiple handicaps including a partial loss of vision
.....	.....	.....	.....	5.9 of multi-professional case conferences (held by representatives from such fields as medical, psychological, educational and social welfare) to study and make recommendations on individual partially seeing children
.....	.....	.....	.....	5.10 of conferences of on-the-job teachers of the partially seeing on pupil placement, curriculum adjustment, child study, etc.
.....	.....	.....	.....	5.11 at rehabilitation centers for partially seeing youth and adults
.....	.....	.....	.....	5.12 of ophthalmological specialists
.....	.....	.....	.....	5.13 at non-school community organizations offering services to the partially seeing, such as recreation groups, clubs, and community houses
.....	.....	.....	.....	5.14 Visits to the homes of partially seeing children in the company of supervising teachers
				Experiences in drawing educational interpretations from—
.....	.....	.....	.....	5.15 ophthalmological and other medical reports
.....	.....	.....	.....	5.16 psychological reports on partially seeing children
.....	.....	.....	.....	5.17 reports of social workers on partially seeing children
.....	.....	.....	.....	5.18 cumulative educational records on partially seeing children

6. Are there personal characteristics needed by a teacher of partially seeing children which are different in *degree* or *kind* from those needed by a teacher of so-called normal children?

Yes .... No ....

If your answer is "yes", please list and comment (attach an additional page if necessary):

11. Indicate (1) the amount of successful *classroom teaching* of so-called NORMAL children which you believe should be *minimal*, *desirable* and *ideal* prerequisites for a teacher of partially seeing children, and (2) the amount of teaching of so-called normal children which you have had.
(Place ONE check ✓ in *each* column on the *right* opposite the appropriate amount.)

Amount of teaching of so-called Normal children as a Prerequisite for teaching partially seeing children	Minimal	Desirable	Ideal	Amount which you have had
No teaching of normal children				
At least one semester of half-time student-teaching with normal children (or equivalent)				
At least one semester of full-time student-teaching with normal children (or equivalent)				
At least one year of on-the-job classroom teaching with normal children				
At least two years of on-the-job classroom teaching with normal children				
At least three years of on-the-job classroom teaching with normal children				
Other (specify):				

12. Indicate (1) the amount of *student-teaching* with partially seeing children that you believe should be *minimal*, *desirable* and *ideal* prerequisites for a teacher of the partially seeing, and (2) the amount of *student-teaching* of partially seeing children you have had.
(Check ✓ in *each* column on the *right* opposite the appropriate amount.)

Amount of student-teaching of partially seeing children needed as a Prerequisite for on-the-job teaching of partially seeing children	For experienced regular classroom teachers			For teacher-candidates with only student-teaching of so-called normal children			Amount which you have had
	Minimal	Desirable	Ideal	Minimal	Desirable	Ideal	
No student-teaching of partially seeing children							
1–75 clock hours [3]							
76–150 clock hours							
151–225 clock hours							
226–300 clock hours							
Other (specify):							

[3] One semester hour=15 clock hours; one quarter hour=10 clock hours; one academic year=450 clock hours.

II. EXCERPTS FROM INQUIRY FORMS EXC–1, EXC–3, AND EXC–2A FILLED OUT BY (a) SPECIAL EDUCATION PERSONNEL IN STATE DEPARTMENTS OF EDUCATION, (b) DIRECTORS AND SUPERVISORS OF SPECIAL EDUCATION IN LOCAL SCHOOL SYSTEMS, AND (c) STAFF MEMBERS OF SPECIAL EDUCATION DEPARTMENTS IN COLLEGES AND UNIVERSITIES, RESPECTIVELY.

Inquiry Form EXC–1: For Special Education Personnel (including Directors, Supervisors, Consultants, and Coordinators) in *State* Education Departments.

Inquiry Form EXC–3: For Directors, Coordinators, Consultants, and Supervisors of Special Education in *Local* School Systems

Miss
Mrs.
1.1 Your name Mr. ..... Date .....

1.2 Your business address .....

City (or Post Office)..... State .....

1.3 Your official title.....
(Specify—Supervisor of teachers of crippled children, etc.)

1.4 In which area or areas of Special Education do you have responsibility?
(Check ✓ as many as are applicable.)

.... Blind	.... Hard of Hearing	.... Socially Maladjusted [5]
.... Crippled [4]	.... Mentally Retarded	.... Special Health Problems [6]
.... Deaf	.... Partially Seeing	.... Speech Defective
.... Gifted		

Inquiry Form EXC–2A: (Opinion Data) To be filled out by *All* Staff Members of Colleges and Universities Who Participate in the Specialized Preparation of Teachers of Exceptional Children

Miss
Mrs.
1.1 Your name Mr. ..... Date.....

[4] The term "crippled" includes the cerebral palsied.
[5] The term "socially maladjusted" includes the emotionally disturbed.
[6] The term "special health problems" includes children with cardiac conditions, tuberculosis, epilepsy, and below-par conditions.

1.2 Official Position .....
(Specify—Director of Special Education, Demonstration Teacher, etc.)

1.3 Official title .....
(Specify—Associate Professor, Graduate Assistant, etc.)

1.4 College or University ..... City ..... State .....

1.6 In which area or areas of Special Education do you have *direct* administrative, instructional, and supervisory responsibilities? (Check √ as many as applicable.)

.... Blind	.... Hard of Hearing	.... Socially Maladjusted [5]
.... Crippled [4]	.... Mentally Retarded	.... Special Health Problems [6]
.... Deaf	.... Partially Seeing	.... Speech Defective
.... Gifted		

Instructions.—In answering special area questions throughout this form, please supply data on those areas in which you have responsibilities and, if you wish, in any additional areas in which you have professional preparation and experience.

IN PUBLISHED REPORTS, OPINIONS EXPRESSED THROUGH THIS INQUIRY FORM WILL NOT BE IDENTIFIABLE WITH THE NAMES OF THE PERSONS COMPLETING THE FORM.

4. (Completed by State Personnel only).
How do you evaluate, in general, the professional preparation of "teachers of exceptional children" employed in your State who, within the last five years, have completed a sequence of courses of specialized preparation? [7]

(Answer the following questions by placing +, 0, or — in the respective columns for each area you complete, according to the following key.)

\+ =yes
0 =uncertain or undecided
— =no

Footnotes 4, 5, and 6 are on page 65.

[7] The definition of a "sequence of courses" which appears on page 5 of the 1949 publication "Opportunities for the Preparation of Teachers of Exceptional Children" (a cooperative study sponsored by the National Society for Crippled Children and the United States Office of Education) has been adopted for use throughout this study. A "sequence of courses" involves 9 to 12 semester hours made up of (1) a study of the characteristics of the particular condition under consideration, (2) a study of teaching methods and curriculum adjustment, and (3) observation and student-teaching in the specialized area.

Item	Blind	Crippled	Deaf	Gifted	Hard of hearing	Mentally retarded	Partially seeing	Socially maladjusted	Special health problems	Speech defective
Do these teachers have adequate preparation—										
4.3 in developing and interpreting educational records?	....	....	....	....	....	....	....	....	....	....
4.4 in interpreting psychological and medical reports?	....	....	....	....	....	....	....	....	....	....
4.5 in diagnosing causes of social and emotional maladjustments?	....	....	....	....	....	....	....	....	....	....
4.6 in group intelligence and achievement testing?	....	....	....	....	....	....	....	....	....	....
Do these teachers have an adequate understanding—										
4.7 of the basic principles of child growth and development?	....	....	....	....	....	....	....	....	....	....
4.8 of methods and teaching aids used in their specialized area, and how to apply these to their teaching?	....	....	....	....	....	....	....	....	....	....
4.9 of the relationship between general and special education?	....	....	....	....	....	....	....	....	....	....
4.10 Do these teachers have the ability to plan with groups of pupils so as to provide for group participation according to each child's abilities?	....	....	....	....	....	....	....	....	....	....
4.11 Do these teachers have the ability to plan a curriculum suited to the individual and group needs of their pupils?	....	....	....	....	....	....	....	....	....	....
4.12 Do these teachers, upon graduating, have a working knowledge about agencies concerned with exceptional children, the services they offer, and how to secure these services?	....	....	....	....	....	....	....	....	....	....
4.13 Are these teachers, upon graduating, sufficiently familiar with the services provided for exceptional children by speech, psychological, and medical clinics, and so on?	....	....	....	....	....	....	....	....	....	....
4.14 Do these teachers have an adequate basic orientation to the education of various types of exceptional children?	....	....	....	....	....	....	....	....	....	....
4.18 Are these teachers able to ascertain and to teach at the appropriate developmental levels of their pupils?	....	....	....	....	....	....	....	....	....	....

4. (Complete by local personnel only).
How do you evaluate, in general, the professional preparation of "teachers of exceptional children" employed in your school system who, within the last seven years, have completed a sequence of specialized preparation [1] leading to initial certification or approval?
Answer the following questions for the areas in which you have responsibility by placing +, 0, or — in the respective columns for each area you complete, according to the following key:

+ = yes
0 = uncertain, undecided or no clear trend (half and half)
— = no

[1] A sequence of specialized preparation involves three courses or at least 9 to 12 semester hours made up of (1) a study of the characteristics (physical, mental, and emotional) of the particular condition under consideration; (2) a study of the teaching methods and curriculum adjustments needed; and (3) observation and student-teaching in the specialized area. This definition appears on page 5 of the 1949 publication, "Opportunities for the Preparation of Teachers of Exceptional Children," (a cooperative study sponsored by the National Society for Crippled Children and Adults, Inc., and the United States Office of Education), and has been adopted for use throughout this study.

Item	Blind	Crippled	Deaf	Gifted	Hard of hearing	Mentally retarded	Partially seeing	Socially maladjusted	Special health problems	Speech defective
Do these teachers have adequate preparation—										
4.3 in developing and interpreting educational records?										
4.4 in interpreting educational and psychological reports and case histories or records?										
4.5 in making use of medical reports?										
4.6 in identifying causes of social and emotional maladjustments?										
4.7 in group intelligence and achievement testing?										
Do these teachers have an adequate understanding—										
4.8 of the basic principles of child growth and development?										
4.9 of teaching methods used in their specialized area, and how to apply these to their teaching?										
4.10 of the teaching aids and equipment used in their specialized areas and how to apply these to their teaching?										
4.11 Do these teachers have the ability to plan with groups of pupils so as to provide for group participation according to each child's abilities?										
4.12 Do these teachers have the ability to plan a curriculum suited to the individual and group needs of their pupils?										

Item	Blind	Crippled	Deaf	Gifted	Hard of hearing	Mentally retarded	Partially seeing	Socially maladjusted	Special health problems	Speech defective
Do these teachers have an adequate understanding—Continued										
4.13 Do these teachers, upon graduation, have an adequate working knowledge about agencies concerned with exceptional children, the services they offer, and how to secure these services, when they enter the field?										
4.14 Do these teachers, upon graduation, have sufficient familiarity with services provided for exceptional children by speech, medical, psychological, and other clinics?										
4.15 Do these teachers have an adequate basic orientation to the education of various types of exceptional children?										
4.17 Do these teachers tend to teach at an appropriate level and not above or below the developmental levels of their pupils?										

5. (Completed by State and Local Personnel; see also Inquiry Form EXC–4G, Questions 11 and 12.) Please complete the following table.

Item	Blind	Crippled	Deaf	Gifted	Hard of hearing	Mentally retarded	Partially seeing	Socially maladjusted	Special health problems	Speech defective
5.1 Indicate the amount of successful classroom teaching with so-called *normal* children that you believe should be MINIMAL, DESIRABLE and IDEAL prerequisites for a special education teacher-candidate. Place THREE letters (M, D and I) in each area you complete according to the following key: M = minimal D = desirable I = ideal										
5.11 No teaching of normal children										
5.12 At least one semester of half-time student-teaching with normal children (or equivalent)										

Item	Blind	Crippled	Deaf	Gifted	Hard of hearing	Mentally retarded	Partially seeing	Socially maladjusted	Special health problems	Speech defective
5.13 At least one semester of full-time student-teaching with normal children (or equivalent)										
5.14 At least one year of on-the-job classroom teaching with normal children										
5.15 At least two years of on-the-job classroom teaching with normal children										
5.16 At least three years of on-the-job classroom teaching with normal children										
5.17 *Other* (specify):										
5.2 Indicate the amount of student-teaching with *exceptional children* which you believe should be MINIMAL, DESIRABLE, and IDEAL prerequisites for a special education teacher-candidate who is a successful regular classroom teacher. (Use the M, D, and I key as in item 5.1)										
No student-teaching in the specialized area										
1–75 clock hours [8]										
76–150 clock hours										
151–225 clock hours										
226–300 clock hours										
Other (specify):										
5.3 Indicate the amount of student-teaching with *exceptional children* which you believe should be MINIMAL, DESIRABLE, and IDEAL prerequisites for a special education teacher-candidate who has *only student-teaching with normal children.* (Use the M, D, and I key as in item 5.1.)										
No student-teaching in the specialized area										
1–75 clock hours										
76–150 clock hours										
151–225 clock hours										
226–330 clock hours										
Other (specify):										

6. (Completed by State, Local, and College Personnel)
Below are the qualifications of six candidates for positions as teachers of exceptional children. In your opinion which TWO would be the *most* likely to succeed?
(Assume the personality and physical characteristics of the candidates and the calibre of professional preparation to be comparable.)

[8] One semester hour=15 clock hours; one quarter hour=10 clock hours; one academic year=450 clock hours.

Answer, by areas, by placing *two* "M's" in each column you complete, according to the following key:

M = Most likely to succeed.

(We realize the items below are not easy to analyze, but your reaction to this question is extremely important, so please give the items your best consideration.)

Item	Blind	Crippled	Deaf	Gifted	Hard of hearing	Mentally retarded	Partially seeing	Socially maladjusted	Special health problems	Speech defective
CANDIDATE A: A four-year *undergraduate* program completed of specialized preparation (including student-teaching with normal and exceptional children) but *without* on-the-job teaching experience with *normal* or *exceptional* children										
CANDIDATE B: A one-year *graduate* program completed of specialized preparation (including student-teaching in the specialized area) immediately following the completion of a bachelor's program in general teacher education, but *without* on-the-job teaching experience with *normal* or *exceptional* children										
CANDIDATE C: A one-year graduate program completed of specialized preparation (including student-teaching in the specialized area), for experienced regular classroom teachers holding a bachelor's degree in general teacher education, and *with* on-the-job teaching experience with *normal* children only										
CANDIDATE D: No specialized teacher preparation but holding a bachelor's degree in general teacher education; *no* teaching experience with exceptional children, but *having* teaching experience with *normal* children										
CANDIDATE E: No specialized teacher preparation but holding a bachelor's degree in general teacher education (including student-teaching with normal children), but *without* on-the-job teaching experience with *normal* or *exceptional* children										
CANDIDATE F: No specialized teacher preparation at a college or university but holding a bachelor's degree in general teacher education; and *with* on-the-job teaching experience both with *normal* and with *exceptional* children in the specialized area										

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